SMS - Playstation 2 Simple Media System

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SMS - Playstation 2 Simple Media System

User Manual

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> **Tip**
>
> Some mirror copies of this manual are starting to appear across the internet. For the original (and most up-to-date) version, please go to Playstation 2 Simple Media System

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Chapter 1. Introduction

Chapter 1. Introduction

Simple Media System (SMS) is a result the original author's (Eugene Plotnikov's) curiosity about Sony's Playstation2, MIPS, DivX and MP3. His original goal was to create a simple DivX player able to play good resolution movies at good frame rate on an unmodded PS2 without any extra equipment such as HDD and network adapter.

Why create a complete "system"? Just because having only a player program is not enough. Since the PS2 conventionally ignores "illegal" disks, he took the idea of Drakonite with his UMCDR and developed his own "UMCDR". (called CDDAFS). It just stores data on a CD audio disk format, which can be read on (hopefully) any PS2.

This is the first component of SMS. The second component is a PC program that makes cue/bin files in order to burn such a disk. And, finally, comes a player program itself. This system is not complete yet, but it can play DivX movies with sound at good frame rate already. Player's base is a famous ffmpeg project. EEUG took just some parts of it (DivX 5XX and MP3) and made some modifications specific to PS2 hardware. It has been tested with many DivX/XviD movies with different screen resolutions and encoding methods and it seems to be working.

Since the initial concept, the SMS project has now grown to include support for network files, USB drives, hard disc drives. It now also allows subtitles to be displayed, and contains a fully functional MP3 player. All the software is now available in the subversion (SVN) repository at ps2dev.org. It has been made available in the hope that it will be interesting for PS2 enthusiasts who use it as a base for their own development.

This document provides comprehensive installation and usage instructions. Currently it is written/maintained in DocBook XML format, and processed for output in a variety of formats including single HTML and HTML pages grouped into sections. Later it will (hopefully) be distributed in PDF format as well.

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2.1. Installation Overview

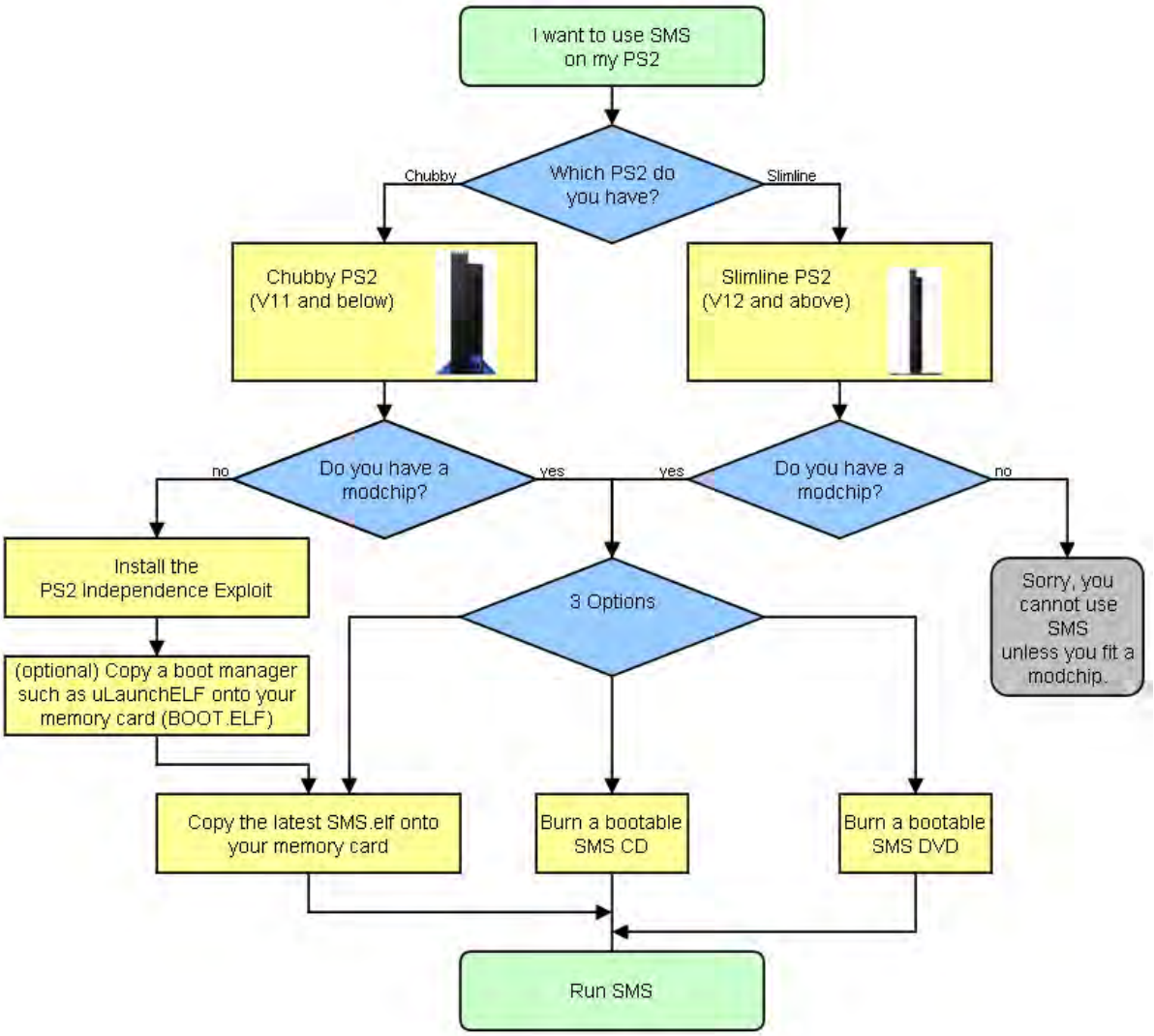

Figure 2.1. Installation overview.

2.2. Requirements

In order to run SMS you will need a working technique to run homebrew PS2 `.ELF` applications, e.g. a working boot manager such as uLaunchELF. The options you have available to you depend mainly on which PS2 variant you have:

- A chubby PS2 (V11 and below) needs one of the following:
  - Independence Exploit (tutorial 1, tutorial 2)
  - Modchip
- A slimline PS2 (V12 and above) needs the following:
  - Modchip

If you can't launch `.ELF` files, you can't run SMS. It is not possible to boot SMS directly from a CD/DVD with an unmodified console. If you've got an unmodified slimline and you still really want to run SMS, as a last resort, you may want to try a disc swapping technique (patience required). Come back to this page when you've got uLaunchELF on your TV screen.

> **Important**
>
> SMS is not an exploit to run ELF files, it needs an exploit or modchip to run. You can't just burn the SMS.ELF file to CD as the PS2 copy protection system will stop you from running it. Please also note that the CDXplorer CD-R method is not a method of starting SMS either. Rather it is a way of supplying media files to SMS once SMS is already running.

Assuming you can meet the above requirements, please select one of the following sections for instructions on how to get SMS onto your PS2:

- Section 2.3, " Copying SMS to your memory card (Independence/Modchip) "
- Section 2.4, " Using a bootable SMS CDR (Modchip only) "
- Section 2.5, " Using a bootable SMS DVDR (Modchip only) "

2.3. Copying SMS to your memory card (Independence/Modchip)

First download a copy of the latest `SMS.ELF`. The latest release is available at http://home.casema.nl/eugene_plotnikov/ also, some older versions are held at http://ps2dev.org/ps2/Projects. Developers can download the source from svn://svn.ps2dev.org.

Now copy this file to your memory card (memory card 0). The recommended (and probably easiest) way to copy the ELF file to your PS2 is using FTP.

2.3.1. Copying SMS to your memory card using FTP

You'll need an FTP server running on your PS2, and an FTP client running on your PC, with either a crossover cable between the two, or patch cables linking them both to a network switch.

2.3.1.1. Starting the FTP Server (uLaunchELF)

The recommended (and again, probably easiest) PS2 FTP server to use is the built in FTP server of 'unofficial' LaunchELF. You can get the `BOOT.ELF` for uLaunchELF from here: http://www.ps2-scene.org/forums/showthread.php?t=37242.

Assuming you've already copied the `BOOT.ELF` onto your memory card using one of the exploit installation techniques, it is very easy to start the FTP server.

Turn on your PS2 and activate your exploit/modchip; first time you use uLaunchELF, it will look something like this:

Figure 2.2. uLaunchELF startup screen.

Press SELECT, go to Network Settings, then press O

Figure 2.3. uLaunchELF Network Settings - step 1

The next screen allows you to change the network settings using your controller pad. The settings are stored in the file `mc0:/SYS-CONF/IPCONFIG.DAT`.

You can change the IP address of your PS2 from the default 192.168.0.10 to anything you want, but it must be on the same subnet as your PC. For more information on network settings, please see the Section 2.6.1, " Network Configuration " section. You can edit the values using the D-pad.

Figure 2.4. uLaunchELF Network Settings - step 2

Once you are happy with the settings, select SAVE and press O:

Figure 2.5. uLaunchELF Network Settings - step 3

On the main screen select OK and press O:

Figure 2.6. uLaunchELF Network Settings - step 4

You should see a message saying that the configuration has been saved:

Figure 2.7. uLaunchELF Network Settings - step 5

Now you need to assign a button to launch the FTP server. Press SELECT, then move to any entry on the list (here, we've used 'START'). Press O, and navigate to MISC, then PS2Net.

Figure 2.8. uLaunchELF: Assigning a Menu Button - step 1

Figure 2.9. uLaunchELF: Assigning a Menu Button - step 2

Figure 2.10. uLaunchELF: Assigning a Menu Button - step 3

> **Note**
>
> PS2Net is the name of the FTP server program that comes built in to uLaunchELF's `BOOT.ELF` file.

Once you've pressed O to confirm, then OK, and O again, you'll see the following screen:

Figure 2.11. uLaunchELF: Assigning a Menu Button - step 4

You'll now see the above screen every time `BOOT.ELF` starts up.

This means that if you press START, PS2Net will be launched, and if you press SELECT, you will go to the config screen.

> **Tip**
>
> You can assign many buttons on this screen. You will probably want to later assign SMS to one of the buttons. If you assign anything to DEFAULT, it will launch automatically after a pre-set delay.

Now press START to launch PS2Net. The following screen is shown while your FTP server is running:

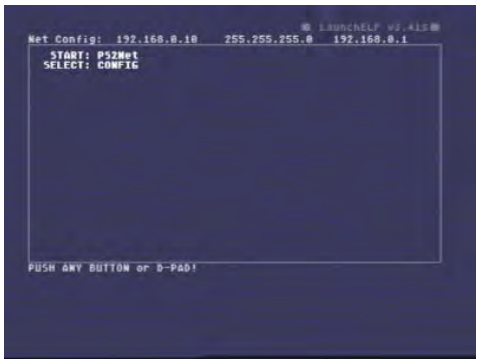

Figure 2.12. uLaunchELF: Starting the FTP server

You can check that the connection between the PC and PS2 is working by starting a command prompt on the PC (start->run, 'cmd' <enter>). Then type **`ping 192.168.0.10`** (or whatever the IP address of your PS2 is). If it's working, you'll see `reply from ...` shown on the screen.

Now that you've got your FTP server running, skip ahead to Section 2.3.1.3. " Starting the FTP Client " for how to upload SMS to your memcard.

2.3.1.2. Starting the FTP Server (ExecFTPs)

If you are *not* using uLaunchELF, you'll need to load a seperate FTP server application onto your memory card such as `EXECFTPS.ELF`. Activate your exploit, and boot to your boot browser (e.g. LaunchELF). You can either configure one of the buttons to start `EXECFTPS.ELF` directly, or navigate to it using the filebrowser, then run it from there.

Figure 2.13. Start ExecFTPs by navigating to the ELF using LaunchELF.

Figure 2.14. Starting ExecFTPs using a configured button (the configuration above shows that by pressing start on controller 1, ExecFTPs will be started).

Either way, once you've got the FTP server running, you should see your TV screen show something like this:

Figure 2.15. Screenshot of ExecFTPs running using default IP configuration.

Figure 2.16. Screenshot of ExecFTPs running using custom IP configuration.

You can check that the connection between the PC and PS2 is working by starting a command prompt `on the` PC (start->run, 'cmd' <enter>). Then type **`ping 192.168.0.10`** (or whatever the IP address of your PS2 is). If it's working, you'll see `reply from ...` shown on the screen.

The configuration settings for ExecFTPs are stored in `mc0:/BxDATA-SYSTEM/CONFIG.DAT`, in the form:

```
<ps2_ip_address> <ps2_subnet_mask> <ps2_default_gateway>
```

If you do not have a `mc0:/BxDATA-SYSTEM/CONFIG.DAT` file, ExecFTPs will automatically use the following defaults:

PS2 Settings	PS2 IP Address:	192.168.0.10
	Subnet Mask:	255.255.255.0
	Default Gateway:	192.168.0.1
	mc0:/BxDATA-SYSTEM/CONFIG.DAT	file not created

If you want to use a custom IP configuration, you will need to modify the file `mc0:/BxDATA-SYSTEM/CONFIG.DAT`. However, if you intend to use FTP to copy a custom `CONFIG.DAT` file to your PS2, then you'll need to get it working with the defaults first. For more information on network settings, please see Section 2.6.1, " Network Configuration ".

> **Note**
>
> ExecFTPs stores its settings in `mc0:/BxDATA-SYSTEM/CONFIG.DAT`. This is different from the file `mc0:/SYS-CONF/IPCONFIG.DAT` where SMS and uLaunchELF/PS2Net store their settings.

2.3.1.3. Starting the FTP Client

Once you've got the FTP server working, and successfully PINGed your PS2, start your FTP client. Lots of people seem to be recommending FlashFXP (http://www.inicom.net/pages/en.ffxp-download.php), but I was happier with the free (and non-nagware) GPL FileZilla (http://sourceforge.net/projects/filezilla). Not all FTP clients will work. For example I couldn't get FTPexplorer to work for some reason.

Load the FTP client on your PC (example is FileZilla), then type in the IP address of your PS2 in the 'Host:' box. Some people have also recommended that you need to enable Passive (or PASV) mode. I've found that this isn't necessary, but by all means go ahead if you like, the setting is accessed by clicking the 'Advanced' button on the form below.

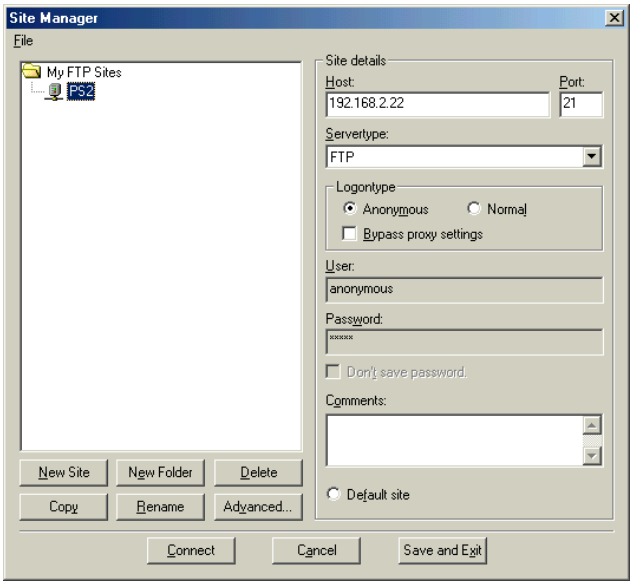

Figure 2.17. Setting up the IP to connect to (note that the default IP address for the PS2 is 192.168.0.10).

When you are ready, click 'Connect', and after a blur of messages at the top of the screen, you should see something like the following page:

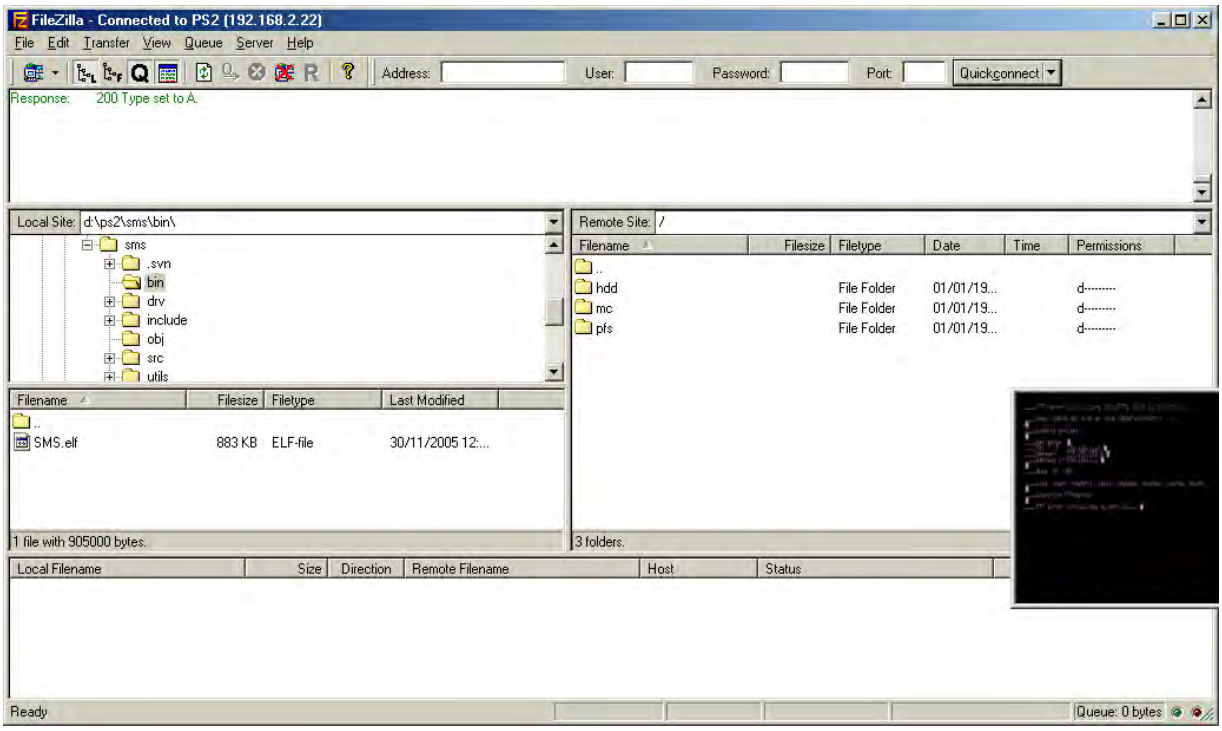

Figure 2.18. FileZilla FTP client while connected to PS2.

In the 'Remote Site' section you should see 'hdd, mc, pfs'. These are the storage devices on your PS2. Hdd is the hard disc drive, and mc is the memory card. (if you don't see anything, try pressing F5 to refresh). Double click mc, then '0'. The two memory card slots are accessed via `/mc/0` and `/mc/1` (slots 1 and 2 on the Playstation2).

I'd recommend putting your `SMS.ELF` in a folder called 'SMS', as the settings will also be stored in `/mc/0/SMS`, but you can put it where you wish. Right click to create a new folder if necessary.

Navigate to your downloaded `SMS.ELF` in the local site browser, then drag the file from the left window to the right window. You should see a progress bar as the transfer completes:

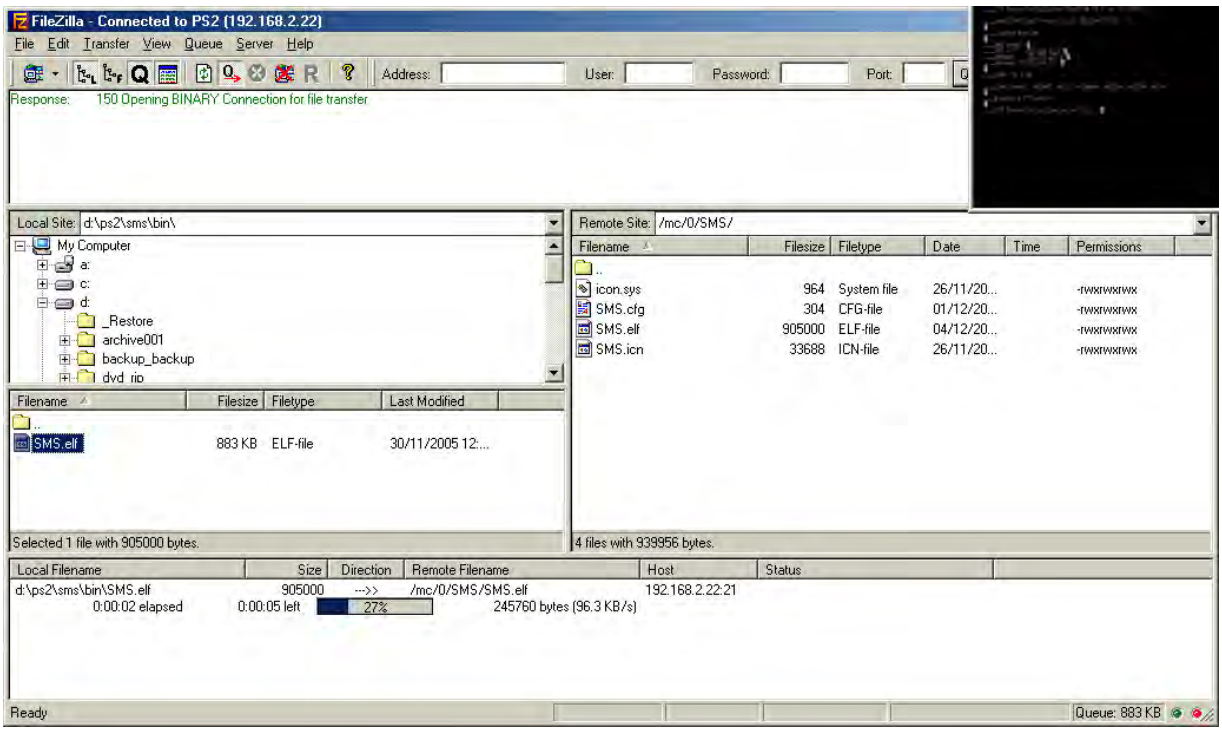

Figure 2.19. FileZilla FTP client: Transfer of file in progress.

Congratulations, you've now copied the SMS executable to your memory card. Close down your FTP client then restart your PS2.

2.4. Using a bootable SMS CDR (Modchip only)

The author of the SMS website has kindly contributed pre-made CD images for SMS. This means you don't need to go to the bother of creating your own image. PAL and NTSC versions are available, on the page linked above.

When you first use this disc, you will get the default uLaunchELF settings, which is just the file browser. We suggest you go to the settings option, and map a button to launch SMS. (SMS is under CDFS). These settings are saved, so you only have to do this once.

If you want to upgrade SMS later, you can copy the new `SMS.elf` onto a USB drive. Then use the uLaunchELF file browser to copy it over to your PS2's memory card. Put it into the sms folder (otherwise it will appear as 'corrupted data'), and adjust your key mappings to suit. it takes up about half a meg on your memory card.

As the author of SMS does not work on the website himself, the version of SMS in these CD Images will occasionally fall behind. Here are instructions to make your own SMS disc:

2.4.1. Creating Your Own CDR (Modchip Only)

- You will need to find and download CDGenPS2 v3.0
- Download the latest SMS Release, and the latest uLaunchELF release. You will need to sign up at the forums to view the uLaunchELF pages.
- Unzip the uLaunchELF zip file, and delete everything but BOOTc.ELF. (you don't need the other stuff)
- Rename "`BOOTc.ELF`" to "`BOOT.ELF`".
- Rename "`SMS Version x.y (Rev x).elf`" to "`SMS.ELF`"

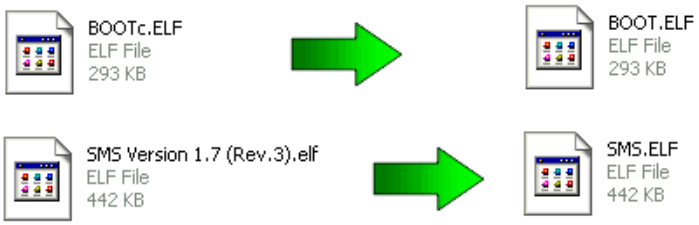

Figure 2.20. Rename both files.

- Open Notepad, and paste this:

```
BOOT2 = cdrom0:\BOOT.ELF;1
VER = 1.00
VMODE = NTSC
```

Note: Use PAL instead of NTSC if you have a PAL TV, and make sure to add a blank line after the last line (press enter after NTSC).

- File --> Save As: "`system.cnf`" (make sure it is a `.cnf` file, not a `.txt` file).

  You should now have:

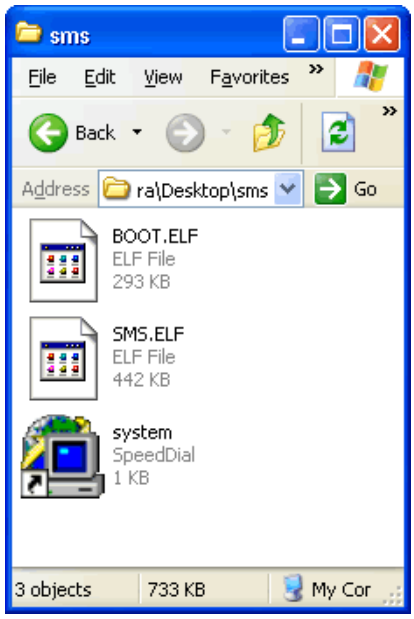

Figure 2.21. Files ready for CDGenPS2.

- Open CDGenPS2, and in order:
  - Drag `system.cnf` into the main window.
  - Drag `BOOT.ELF` into the main window.
  - Drag `SMS.ELF` into the main window.

  (Don't rush, do them one at a time).
- Right click `system.cnf` -> edit.
- choose Fix LBA, and enter '12231':

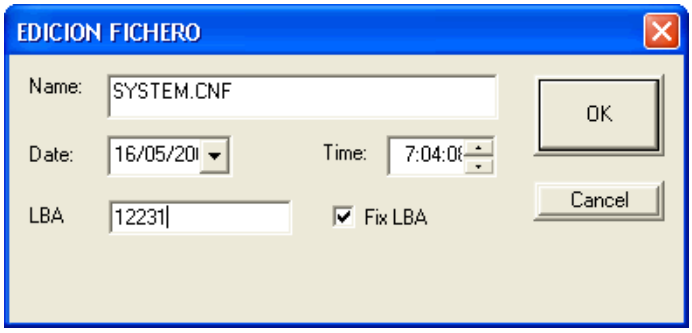

Figure 2.22. Fix LBA option in CDGenPS2.

- Go ahead and add some other files and folders now if you want, such as MP3s and videos... you might as well use the rest of the space on the CD.
- CDGenPS2 should look like this...

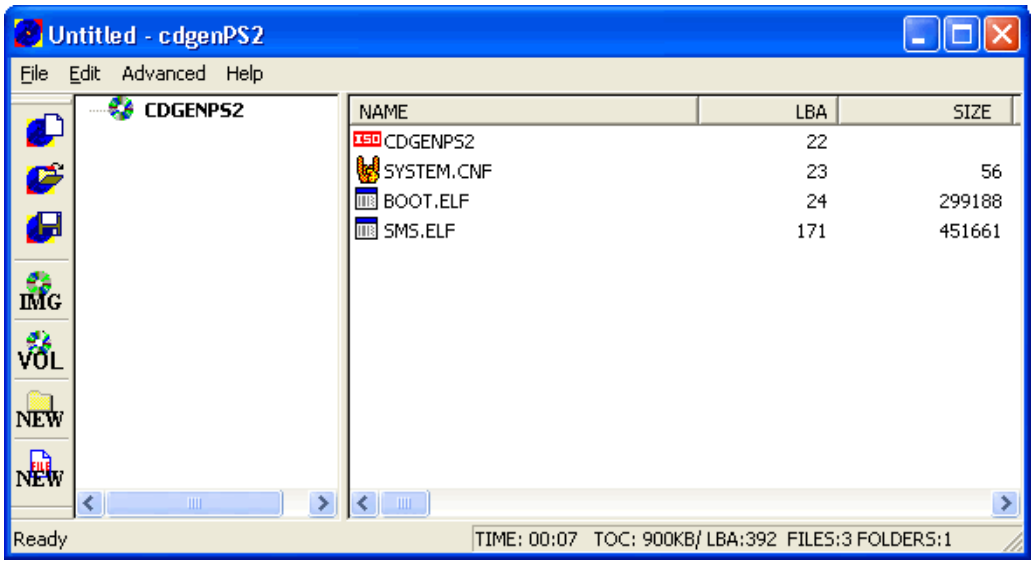

Figure 2.23. CDGenPS2 window after adding files.

- Choose File -> Create CD. Save the file as type BIN files. (the name doesn't matter, so long as you remember where you saved it).
- Burn the image using Disc at Once. If you already know how to burn a CD image, you're done here. just burn the disc and put it in your PS2. if not, read on.
- Open Nero, and cancel the wizard that appears.
- Choose Recorder -> Burn Image (Burn Image may also be under the File menu in some versions of Nero)
- Browse and select the CUE file that was saved with your BIN file when you made the CD image.

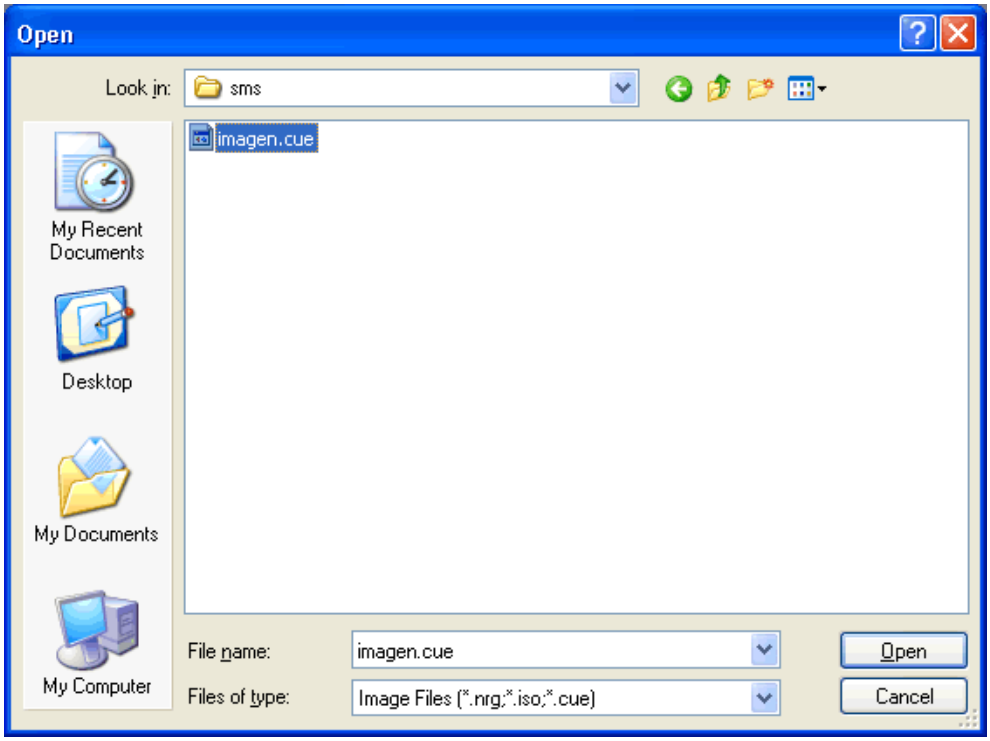

Figure 2.24. Burning the image, step 1.

- Press Burn... I have no trouble myself with 40x, but you may want to lower the speed.

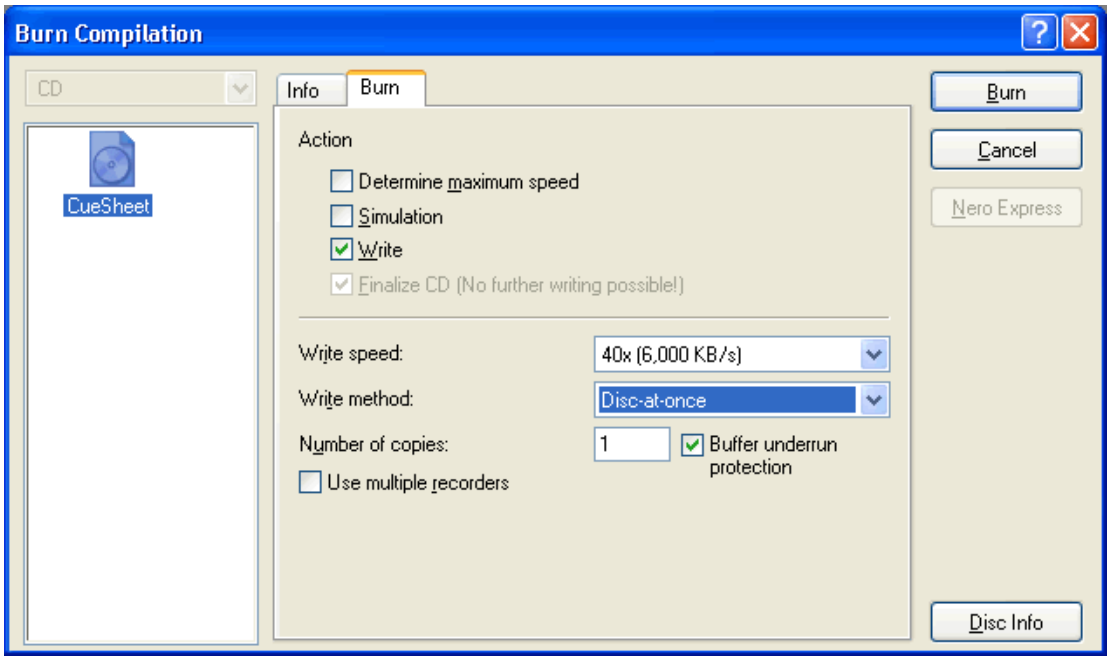

Figure 2.25. Burning the image, step 2.

That's it. you're done. If you don't want to include uLaunchELF on the CD, just rename SMS.ELF to BOOT.ELF.

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2.5. Using a bootable SMS DVDR (Modchip only)

If you're fortunate enough to have a modchip, Swap Magic, or HDLoader/HDAdvance, and access to a DVD writer, the easiest way to get up and running with SMS is to download the DVD .iso image from the SMS Media Player website, and burn it to a blank DVD-/+R.

Refer to your DVD writer application instructions for how to burn ISO images.

After you have burned your DVD, put it into your modchipped PS2 and press reset... that's it.

2.6. Configuration

> **Tip**
>
> Normally there is no need to change any configuration files to get SMS running. If you are just using SMS in standalone mode, you can skip this section. You only need to change the configuration if you want to use SMS in network mode (i.e. play files over a LAN).

2.6.1. Network Configuration

If you have an official Sony™ Network adaptor, and you intend to use SMS to play media files stored on a network, you will need to assign an IP address and subnet to the PS2. Chances are you'll want this in a semi permanent set-up, so this section helps you pick settings that will be compatible with your home network.

IP configuration data for SMS is stored in `mc0:/SYS-CONF/IPCONFIG.DAT`. (not `CONFIG.DAT`). Note that the two files are seperate. SMS will not look for settings in `mc0:/BxDATA-SYSTEM/CONFIG.DAT`.

To set the IP address for your PS2, you will need to create a file named `IPCONFIG.DAT` (e.g. using notepad) and it should have just one line of text:

```
<ps2_ip_address> <ps2_subnet_mask> <ps2_default_gateway>
```

If you created a `CONFIG.DAT` file in the Chapter 2, *Installation* section, you can use the same file, but remember rename it to `IPCONFIG.DAT`. Once you have created this file, you must copy it to your PS2, into the location `mc0:/SYS-CONF/IPCONFIG.DAT`. You can do this using the FTP technique described in the installation section.

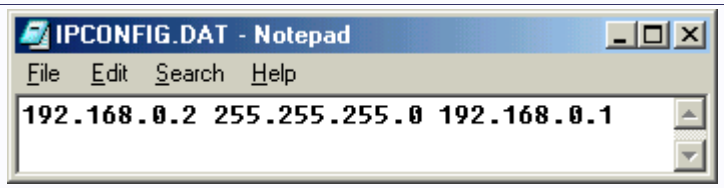
If you are using uLaunchELF as your boot browser, it's easy to configure your SMS IP settings. Just use the boot browser's `Network Settings` option to change the settings with your D-Pad. There's no need to create an `mc0:/SYS-CONF/IPCONFIG.DAT` file manually.

You'll need to choose an IP address for your PS2 that is different from the IP address of any other node on your network, but on the same subnet as your PC. You will have to turn DHCP off on your PC, and use a manual (or static) IP configuration. SMS cannot autoconfigure it's IP address from a DHCP server (see DHCP FAQ.

PS2 Settings	PS2 IP Address:	192.168.a.x
	PS2 Subnet Mask:	255.255.255.0
	PS2 Default Gateway:	192.168.a.z
PC Settings	PC IP Address:	192.168.a.y
	PC Subnet Mask:	255.255.255.0
	PC Default Gateway:	192.168.a.z

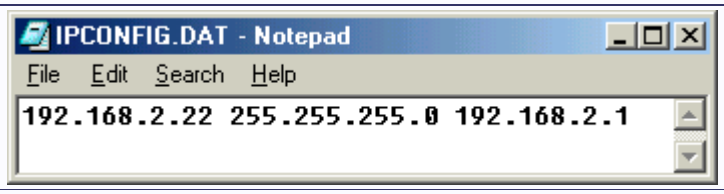
2.6.1.1. Example configuration 1

This configuration is for a PS2 and PC connected directly with a crossover cable, or for both connected to a network switch. There is no internet gateway device to connect to, so the gateway is set to the IP address of the PC.

PS2 Settings	PS2 IP Address:	192.168.0.2
	PS2 Subnet Mask:	255.255.255.0
	PS2 Default Gateway:	192.168.0.1
	mc0:/SYS-CONF/IPCONFIG.DAT	
PC Settings	PC IP Address:	192.168.0.1
	PC Subnet Mask:	255.255.255.0
	PC Default Gateway:	192.168.0.1

2.6.1.2. Example configuration 2

Here is the configuration I use at home. Both PS2 and PC are on the same 192.168.2._ subnet, and my internet access point / router is at 192.168.2.1.

PS2 Settings	PS2 IP Address:	192.168.2.22
	PS2 Subnet Mask:	255.255.255.0
	PS2 Default Gateway:	192.168.2.1
	mc0:/SYS-CONF/IPCONFIG.DAT	
PC Settings	PC IP Address:	192.168.2.23
	PC Subnet Mask:	255.255.255.0
	PC Default Gateway:	192.168.2.1

> **Warning**
>
> If you are connected to the internet via the same network that you are using to connect to your PS2 `be very careful` when you change your PC's IP settings. You must make sure that your PC is set to be on the same subnet as your access point/router (i.e. the first three numbers of the PC IP address are the same as the access point/router), and that the PC Default Gateway remains the same (this will normally be the IP address of your access point. Failure to do this may break your internet connection. If you are not sure what you are doing, please make a note of your starting settings by typing **`ipconfig /all`** at the command prompt.

2.6.2. General Configuration

SMS general configuration information is stored in `mc0:/SMS/SMS.cfg`. This file is written by the application when you save the configuration data, and is not designed to be edited by hand. You do not need to create this file. SMS will create the file when you save the configuration from within SMS (see configuration menu in usage section).

> **Note**
>
> If you are having problems with the configuration settings, it is suggested that you delete your `mc0:/SMS/SMS.cfg` file, and let SMS create a new one for you next time it runs.

Chapter 3. Usage

Chapter 3. Usage

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So, now that you've got SMS installed on your PS2 (see Chapter 2, *Installation*), how do you get it play movies? This chapter explains all you need to know.

To run SMS you first need to run your exploit or start up your PS2 with the modchip installed. Then use the appropriate technique to start the SMS program. If you're using the Independence Exploit insert your (legitimate) PS1 trigger disc, and press reset. This will boot your chosen launcher application, where you can select which actual ELF you want to

run.

Next, if you're using LaunchELF/uLaunchELF as your boot application, you can run SMS by navigating to SMS.ELF and pressing O. You may want to assign a shortcut button to it so it is easier to load next time.

> **Tip**
>
> If you use SMS regularly, you may want to assign it as the 'default' option in LaunchELF, so that it starts automatically, after a short delay.

Once you've got SMS running, you should see the nice SMS graphical interface on your TV set. From this point onwards, all the instructions are the same, whichever Exploit/Modchip you are using.

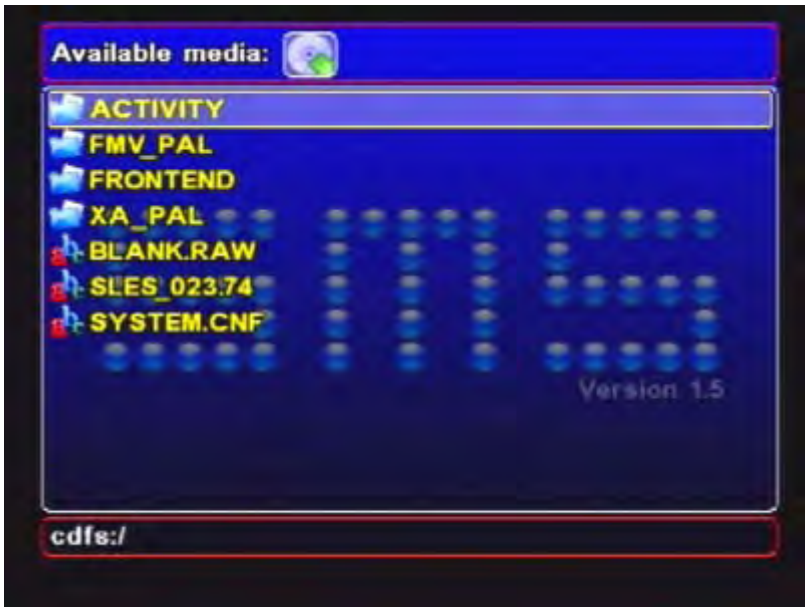

Figure 3.1. Screenshot of SMS main GUI. (files you see are a directory listing of the current CD in the drive - the independence trigger disc in this case).

This is the screen where you will access most features from. The files can be navigated using up/down/left right on controller 1 or 2, and you can play them by pressing X. A special configuration menu is accessed by pressing `start`.

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3.1. Controls

3.1.1. During Startup

Button	Action
Select + R1	NTSC
Select + R2	PAL
Select + R1 + SQUARE	Non-interlaced NTSC
Select + R2 + SQUARE	Non-Interlaced PAL

3.1.2. During Navigation

Button	Action
UP/DOWN	Navigate Files
LEFT/RIGHT	Select between file menu and device menu (e.g. CD Network, USB etc)
START	Accesses special configuration menu
SELECT	-
X	Navigate into selected directory OR Start playback of selected file OR Increase numerical value
O	Decrease numerical value OR (on a folder) play multiple MP3 files without a playlist
TRIANGLE	Up one directory level OR Quit current menu
SQUARE	-
SELECT + TRIANGLE	Exit to boot browser (Quit SMS)
SELECT + O	Power off PS2
L1 + L2 + L3 + L4	Displays 'about' screen / credits
SELECT + L1	Adjust screen position left

SELECT + R1	Adjust screen position right
SELECT + L2	Adjust screen position up
SELECT + R2	Adjust screen position down

3.1.3. During Playback

Button	Action
UP/DOWN	Volume up/down
LEFT/RIGHT	Scroll forwards/backwards OR (after pressing SELECT) Navigate progress bar to required point in film
START	Activate Player Menu OR Resume playback after pause
SELECT	Pause playback and show progress bar (press again to hide text), then use LEFT/RIGHT to navigate progress bar to required point in film.
X	(During playback) Toggle On Screen Display (OSD) - cycles between [time | time remaining | off]. OR (After pressing SELECT) Terminate scrolling and continue playback
O	Toggles display of audio/video synchronisation offset (V/A) [and if available the subtitle/video synchronisation offset (S/V)]
TRIANGLE	Stop playback
SQUARE	Cycle between the five different letterbox/pan-scan modes
L2 / R2	(see O) Adjust audio/video synchronisation offset. (+/-250ms) OR Adjust subtitle/video synchronisation offset. (+/-250ms)
L1 / R1	Pan left or right in pan-scan mode
L1 + R1	Reset pan-scan to centre

3.1.4. Player Menu

The player menu (SMS v1.5 and above), allows you to change settings mid-way through playback. Press START during playback to access the player menu.

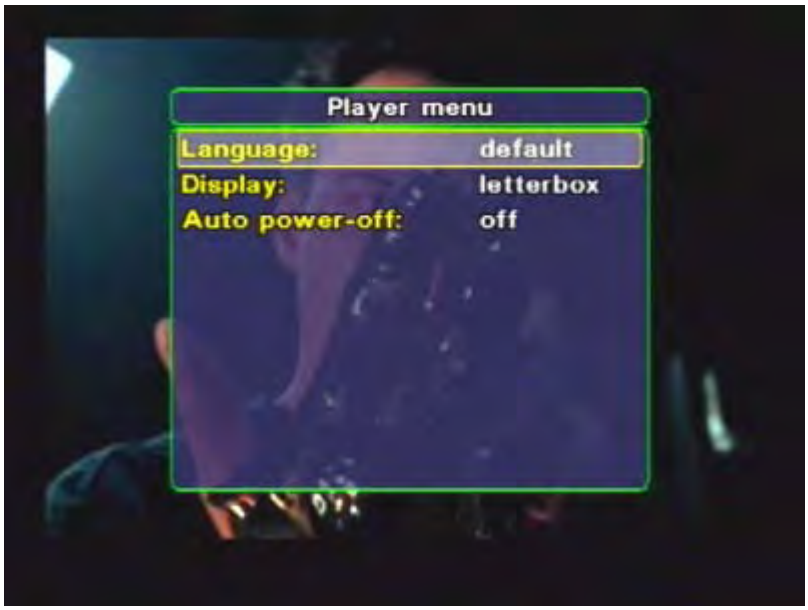

Figure 3.2. Screenshot showing Player Menu.

Menu Item	Description
Language:	X to change the audio language (for avi files with multiple audio streams)
Display:	X to cycle between 5 display modes: letterbox, pan-scan 1, pan-scan 2, pan-scan 3, fullscreen. Letterbox display mode shows the full width of the original video with black bands at top and bottom of screen. Pan-scan zooms in on the video, using more vertical lines of the screen, showing a larger image in the centre. The downside is that the left and right edges of the picture are cropped. Higher pan-scan modes zoom in more (and crop more). Fullscreen mode stretches the image to fit the TV screen - this is useful when playing a widescreen movie file on a widescreen TV.
Auto power-off: (sleep timer)	Automatically powers off PS2 after the time specified. Time starts counting from last button press. X to increase O to decrease auto = power off when movie ends.

3.1.5. Scrollbar

New in version 1.5 is a scroll bar, accessible during playback by pressing SELECT. When activated, the scroll bar shows the current position in the video. This can be adjusted by pressing LEFT/RIGHT, then playback can be resumed from that point by pressing X or START.

Figure 3.3. Screenshot showing Scrollbar feature.

Yeah, that's all well and good, but how do I play my DivX movies?

There are several ways of playing video files:

- Streaming over a network
- From a CD
- From a DVD-R
- From a PS2 internal hard disc drive
- From a USB drive attached to the PS2 (also called USB mass storage device).

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3.2. Playing Files Over A Local Area Network

3.2. Playing Files Over A Local Area Network

First of all, you'll need to have a working network configuration. That means you'll need a network switch with a patch cable to your PS2 and a patch cable to your PC, Alternatively you can use a single crossover cable directly linking your PS2 to your PC. Your PC and PS2 will both need to be on the same subnet with statically assigned IP addresses. If you can't successfully ping your PS2 while you're running SMS, then you'll need to get that working first. For more information see Section 2.6.1, “ Network Configuration ”. Once your network is working, the easiest way to share files is using a windows shared folder. Legacy support for the older methods of PS2Client-gui or RadHostClient running on your PC are also described here.

3.2.1. Playing Media Files Using a Windows Shared Folder

SMS can play media files shared from a regular PC on your network, via a windows 'SMB' share. This is now one of the easiest ways to play your full media collection on SMS. You won't need any additional software to do this. An SMB share can be created on Windows, Linux or MacOS. This section covers the following topics:

- Section 3.2.1.1, “ Setting Up The Shared Folder In WinXP (PC side) ”
- Section 3.2.1.2, “ Setting up SMS to access the shared folder (PS2 side) ”
- Section 3.2.1.3, “ Accessing the shared folder from within SMS ”

3.2.1.1. Setting Up The Shared Folder In WinXP (PC side)

If you already have an SMB share set up, feel free to skip ahead to Section 3.2.1.2, “ Setting up SMS to access the shared folder (PS2 side) ”. Just make sure you note down the IP address of the SMB server and the Netbios name of the SMB server

The following instructions explain how to set up a windows share in WindowsXP home/professional.

Let's assume the folder `D:/Shared/videos/` contains the media files you want to share. Navigate to this folder in windows explorer, then right click on the folder name 'videos' and click Sharing and Security...:

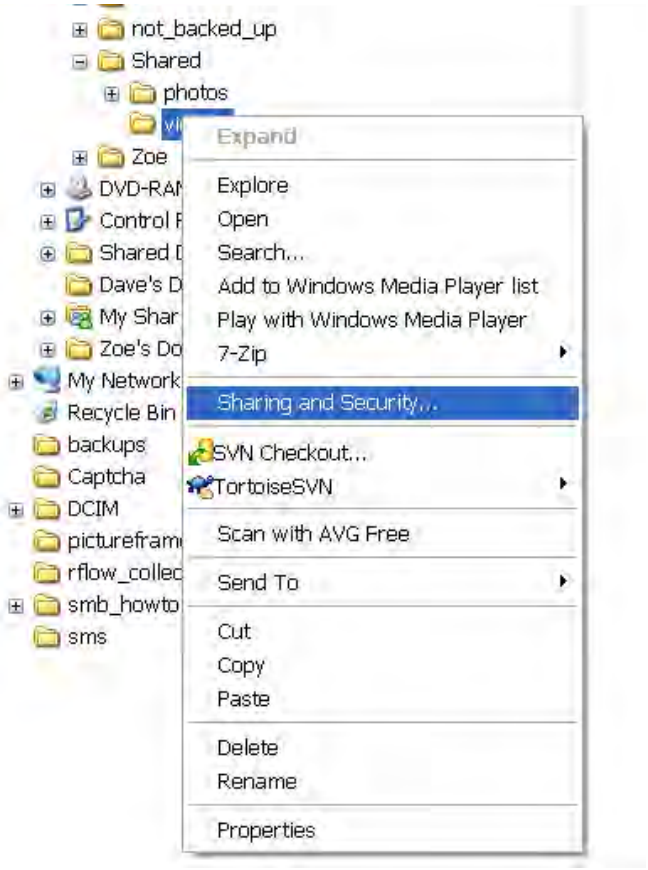

Figure 3.4. Setting up a windows XP share, step 1

In the box that opens up, click the option saying that you understand the security risks but want to share the files without the wizard.

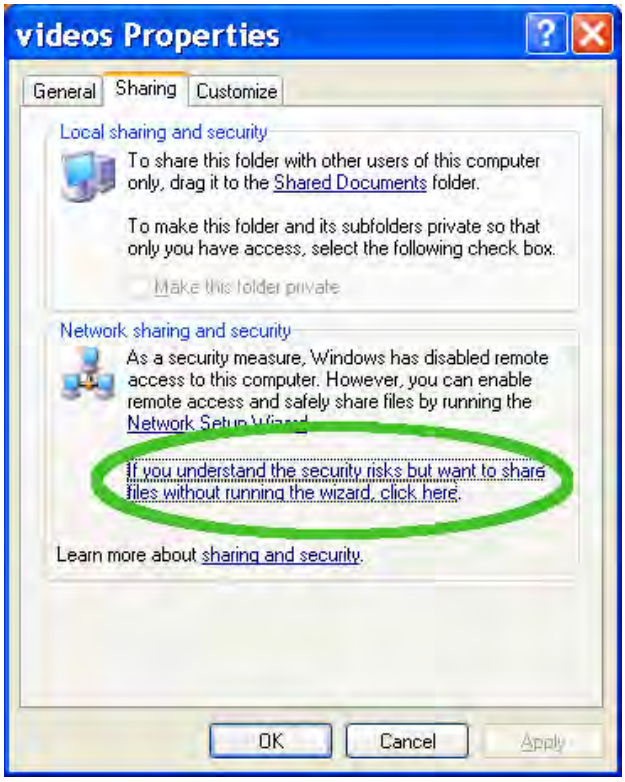

Figure 3.5. Setting up a windows XP share, step 2

In the next box, click '`Just enable file sharing`', then click `OK`.

Now the properties box will have changed, showing the network sharing options. Tick the box '`Share this folder on the network`' and enter a share name, e.g. 'videos'. Leave the 'Allow network users to change my files' option un-ticked. This will make the share read-only.

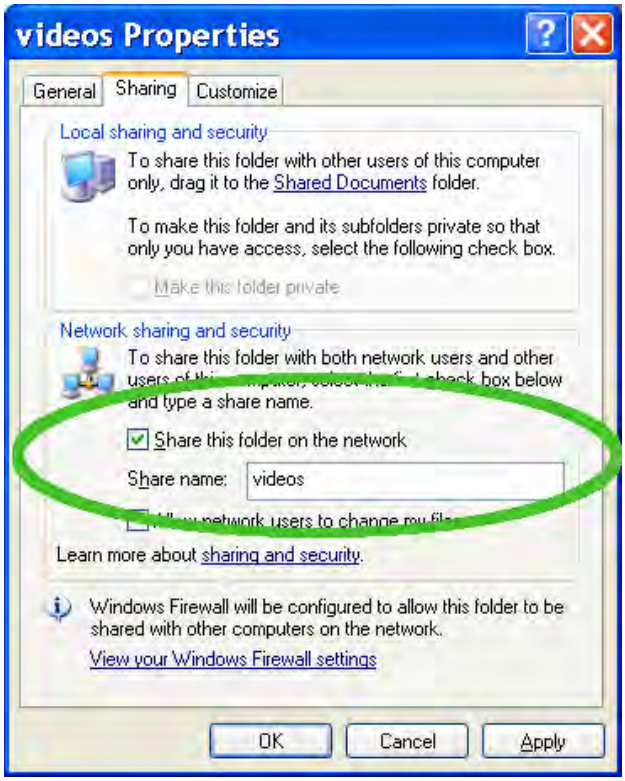

Figure 3.6. Setting up a windows XP share, step 3

Next click OK (unless you are one of those people who feels more comfortable by unnecessarily clicking 'Apply' first). Either way, you'll now have a shared video folder. You should see a 'hand' underneath the folder icon:

Figure 3.7. Shared folder in windows XP

That's it. if you have another computer on your network, you may wish to test the share out before trying it on your PS2.

The next step is to configure SMS on your PS2 to access this new shared folder.

3.2.1.2. Setting up SMS to access the shared folder (PS2 side)

Open up a basic text editor such as windows notepad, and enter the following:

```
<ip address of the SMB server (computer sharing the files)>
<name of the SMB server>
<name of the PS2 (any name will do)>
<username (optional)>
<password (optional)>
```

The name of the SMB server is found in My Computer > Properties > Computer Name > Full Computer Name. Type the name in CAPITALS, omitting the trailing '.' character. The PS2 name can be anything you want. The username and password are only required if your share is user or password restricted. If you have set up the share using the method described above, leave both blank. For example:

```
192.168.2.20
DTHP
Playstation2
```

Save the file to a temporary location (e.g. desktop) as `SMS.smb`. Note that you will probably have to type the " marks into the SaveAs box in notepad, i.e. `"SMS.smb"`. Just typing `SMS.smb` will probably give you a file called `SMS.smb.txt` (although windows will hide the `.txt`) which is not what you want!

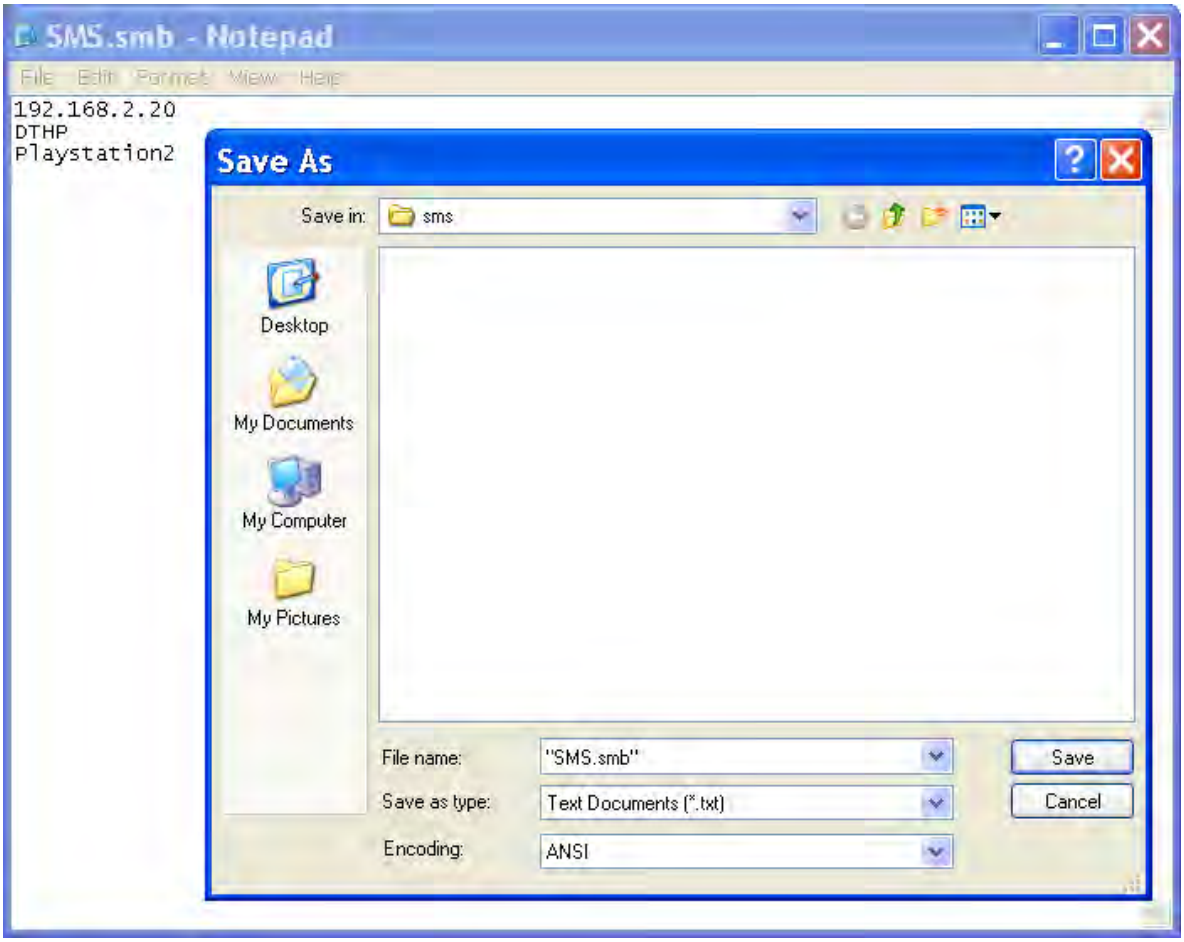

Figure 3.8. Saving the SMS.smb file

Now you must copy this `SMS.smb` file onto your memory card, into the SMS folder. As you've already got a networked PS2, I'm going to assume you'll use FTP to transfer the files (see Section 2.3.1, " Copying SMS to your memory card using FTP " for how to set up an FTP connection). Copy the file to `/mc/0/SMS/SMS.smb`.

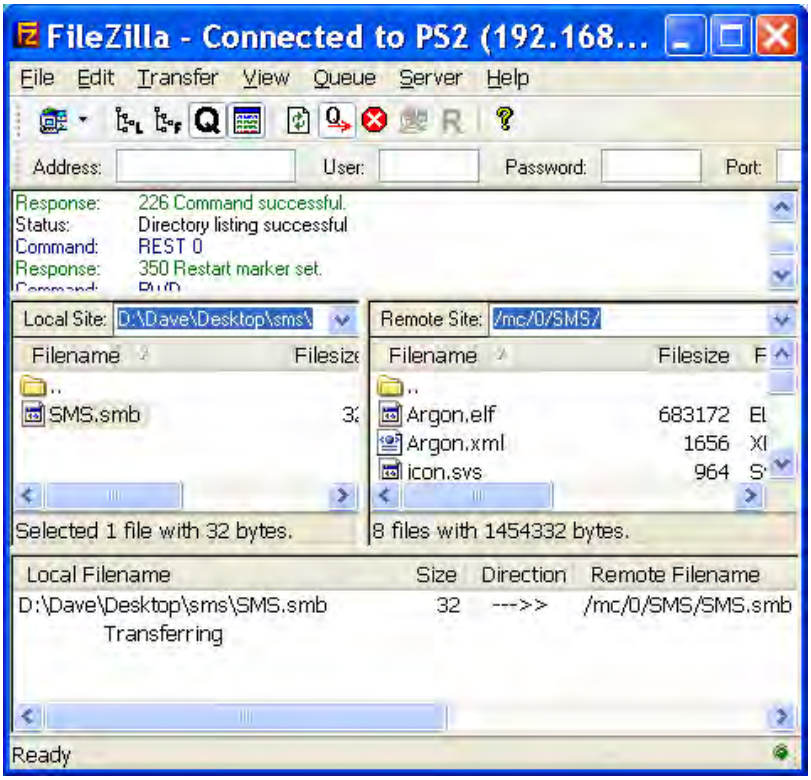

Figure 3.9. Screenshot of SMS.smb upload via FTP

Once the transfer is finished, restart your PS2 and load up SMS.

3.2.1.3. Accessing the shared folder from within SMS

On the PS2: Load up SMS, then open the Device settings menu (press START, select Device settings..., press X.

Figure 3.10. Device settings menu

If the Autostart network option is turned on, turn it off:

Figure 3.11. Device settings menu (Autostart network disabled)

Press TRIANGLE to leave this menu, then select Save settings, from the main menu and press X. Now restart SMS.

Go back to the 'Device settings' menu, and scroll down, you should see a new option Network protocol. Press X to change this option to SMB/CIFS.

Figure 3.12. Device settings menu (Select SMB/CIFS Network protocol)

Now select Start network support and press X. After an *Intialising Network...* message, you should now see a new icon in the PS2 browser:

Figure 3.13. SMB share connected (right hand icon in top menu bar)

At this point you may wish to turn 'Autostart network' back on, if you do so, don't forget to Save settings afterwards. Press TRIANGLE to exit the menu, then RIGHT, RIGHT, X to select the network share:

Figure 3.14. Navigating an SMB share

Press X to navigate into the folder, then X as usual to play the file.

Figure 3.15. Navigating an SMB share - selecting file for playback

Figure 3.16. Playback started

> **Tip**
>
> If you have problems, check the settings in your `SMS.smb` file. Make sure that you have the correct IP address entered (the IP address of your PC), and make sure the SMB server name is in CAPITALS.

3.2.2. Playing Network Video Files Using RadHostClient

> **Note**
>
> The recommended (and easiest) way to play networked media on SMS is to use an SMB share (feature introduced in SMS 1.9). This section is only provided for legacy support.

Download and install RadHostClient from http://ps2dev.org/ps2/Tools/Misc_tools/Rad_Host_Client_1.4. Run the application on your PC, and type in the IP address of your PS2 in the text box at the top. Drag folders into the list at the bottom. They will automatically be made available to the PS2.

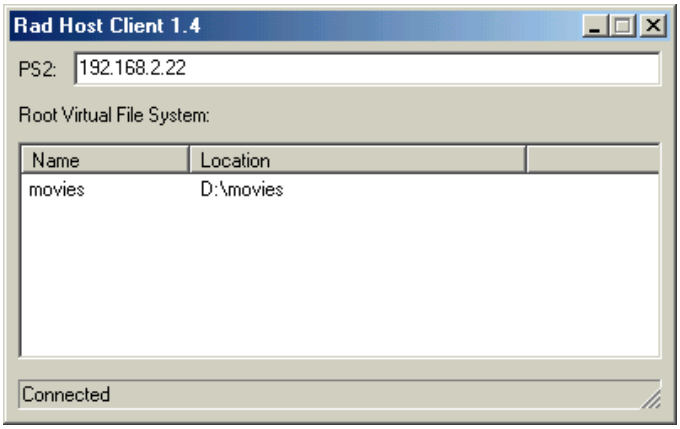

Figure 3.17. RadHostClient in operation.

If you have not done so already, start SMS on your PS2, then On the PS2 press START to bring up the SMS config menu, then select Nework settings..., then select start network interface now and press X.

Within 10 seconds you should see a new device icon at the top of the SMS screen:

Figure 3.18. Screenshot of SMS with network support activated, (note additional icon at top of screen).

Now press RIGHT to select the network icon, and browse into the folders on your PC. When you press X, the PS2 will begin playback, and will stream the file from your PC across the network.

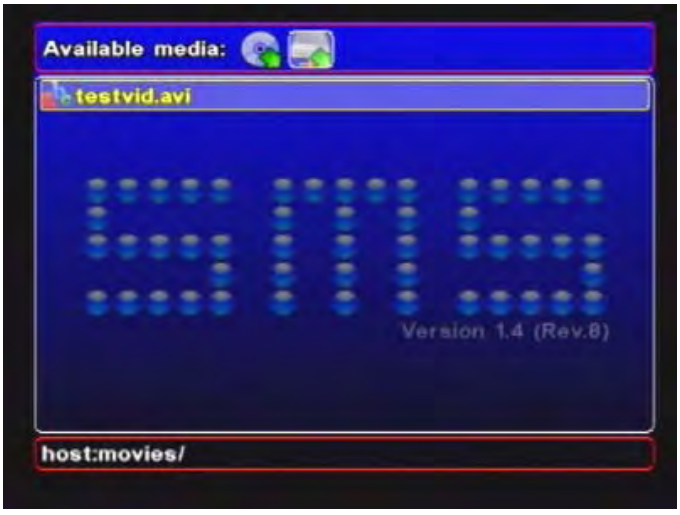

Figure 3.19. Browsing networked folder shared from remote PC.

Warning

Do not close RadHostClient while your PS2 is browsing files shared via the client. This will cause both RadHostClient and the PS2 to crash.

If the PS2 crashes or restarts, you may need to restart RadHostClient.

3.2.3. Playing Network Video Files Using PS2Client-gui

Note

The recommended (and easiest) way to play networked media on SMS is to use an SMB share (feature introduced in SMS 1.9). This section is only provided for legacy support.

On the PC download and install ps2client-gui. Run the GUI, and select the directories of where your videofiles are. If you have a base directory that contains all your files, enter that directory. It doesn't matter if your files are in subdirectories within this one, as you will be able to navigate them in SMS. Once you click OK, it will make this available to your PS2.

If you have not done so already, start SMS on your PS2, then On the PS2 press START to bring up the SMS config menu, then select Nework settings..., then select start network interface now and press X.

You should see a new device icon appear at the top of the screen. If you don't see one after 20 secs, try stopping and restarting the ps2client-gui program on your PC. Once the icon appears (can take around 15seconds), press RIGHT to select it, then X. You should now be able to navigate all folders beneath the one you shared.

3.3. Playing video files from a CD-R (without a modchip)

> **Note**
>
> To play video files from a CD, you need to burn the CD in a special format. The PS2 cannot read the data from ISO format CDRs. The “special format” is created using CDXplorer.exe.

3.3.1. Instructions in Short

- Download CDXplorer.exe from SVN;
- Launch it on Windows;
- Drag/drop the files you want from Windows explorer to the application (or use '+' toolbar button);
- Save your compilation - you'll get cue/bin file pair;
- Close the application;
- Launch CD burning application (I use Nero);
- Open generated cue file;
- If you use Nero 5 then select Disk-at-once/96 option;
- Burn it;

Good luck

Eugene

> **Note**
>
> If you want to burn avi files to a DVDR, please refer to the DVD-R section.

3.3.2. Instructions in detail

The unmodified PS2 cannot load data from a normal CDR. This is due to built in copy protection. To get around this, the developer of SMS designed a clever trick that fools the PS2 into thinking that the CD-R is an audio CD. The PS2 is allowed to load a CDR if it's an audio CD. The basic principle relies on creating a disc in the so called CDDAFS format, which is essentially a disc that looks enough like an audio CD for the PS2 to accept it. The disc contains your .avi file data hidden inside audio tracks, and SMS converts these as it

reads them. Clever huh?

The developer has written a utility (CDXplorer.exe) to create the .cue/.bin files from your .avi files, ready to burn to CDR. Then, provided your CD burning software knows how to read .cue/.bin files, you can burn them to CD.

> **Important**
>
> You must not simply write the .cue and .bin files to an ISO (data) CD format. This will not work. You must use a CD burning application which understands .cue and .bin files. The only two known at present are Nero 5 and, cdrdao.

Download CDXplorer.exe from http://ps2dev.org/ps2/Projects/Softwares (`CDXplorer.exe` can be found in `SMS.zip` file on the page).

Run the application by double clicking on it (no installation is necessary).

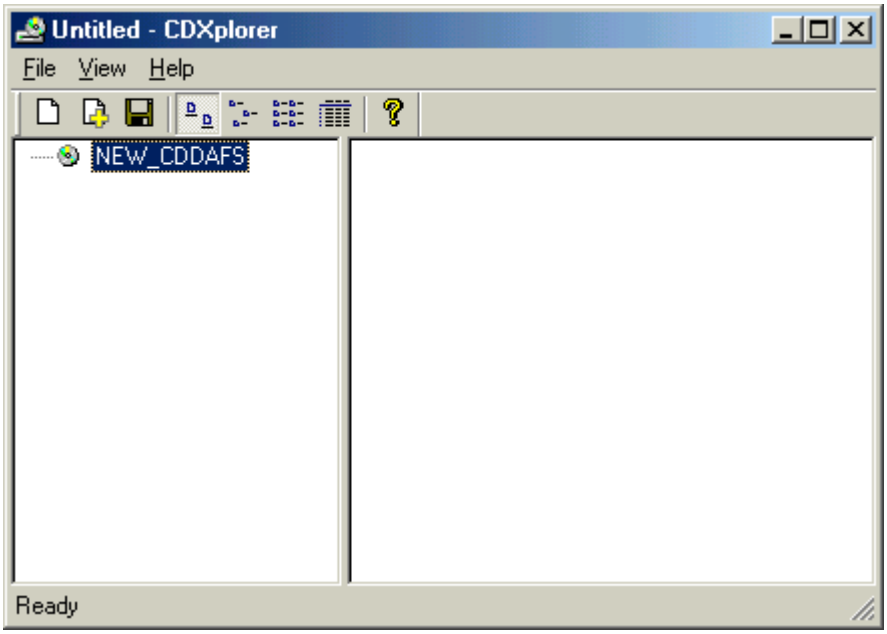

Figure 3.20. Screenshot of CDXplorer.

Once CDXplorer is running, drag and drop 1 or more AVI files into the right hand window.

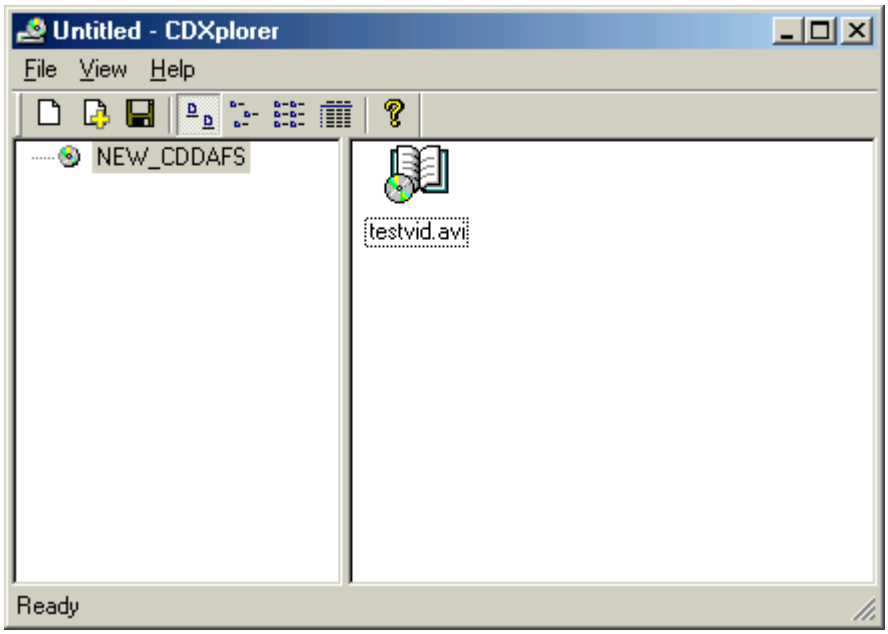

Figure 3.21. Screenshot of CDXplorer showing avi file `testvid.avi` after dragging and dropping from Windows Explorer.

Click file->SaveAs, then type in a name (e.g. 'test') then press <enter>. This will automatically save two files `test.cue` and `test.bin` in the current folder.

Now you can close down CDXplorer.

Next open up your CD burning application. This must be a CD burning application that allows you to load .cue files. Open the cue file.

(unconfirmed): It may be necessary to use a CDR (rather than a CD-RW) - I only suspect this because i've not yet managed to get a CD-RW to work.

3.3.2.1. Nero 5

If you are using Nero 5, select 'Disk-at-once/96', then burn to a CD-R.

3.3.2.2. If You've Not Got Nero 5

If you've not got Nero 5 (I haven't got it), then it is possible to use another (free) application to burn CDs in disc-at-once mode. The only program I've used successfully is cdrdao (CDR Disc At Once), which is a command line cd burning application. It is available for linux and windows. If you find any other applications that are easier to use, please post the details on the SMS support forum. Installation of cdrdao is as follows:

Linux (Fedora Core 4)	`# yum install cdrdao`
Windows	Download and install http://ovh.dl.sourceforge.net/sourceforge/cdrdao/cdrdao-1.1.5.bin.x86.win32.zip.

The CD is written with the following command: (Note the -–force option which is is needed to make the burn continue despite the 'shorter than 4 seconds' warning.)

```
cdrdao write --speed MAX --force test.cue
```

The output will hopefully look something like this:

```
[dave@blue ~]$ cdrdao write --speed MAX --force test.cue
Cdrdao version 1.1.9 - (C) Andreas Mueller <andreas@daneb.de>
SCSI interface library - (C) Joerg Schilling
Paranoia DAE library - (C) Monty
Check http://cdrdao.sourceforge.net/drives.html#dt for current
driver tables.
WARNING: Track 1: Length is shorter than 4 seconds.
Error trying to open /dev/cdrecorder exclusively ... retrying in 1
second.
Using libscg version 'schily-0.8'
/dev/cdrecorder: PHILIPS CDRW2412A Rev: P1.4
Using driver: Generic SCSI-3/MMC - Version 2.0 (options 0x0000)
Burning entire 74 mins disc.
Starting write at speed 24...
Pausing 10 seconds - hit CTRL-C to abort.
Process can be aborted with QUIT signal (usually CTRL-\).
Turning BURN-Proof on
Executing power calibration...
Power calibration successful.
Writing track 01 (mode AUDIO/AUDIO )...
Writing track 02 (mode AUDIO/AUDIO )...
Wrote 110 of 110 MB (Buffers 100% 98%).
Wrote 49178 blocks. Buffer fill min 93%/max 100%.
Flushing cache...
Writing finished successfully.
[dave@blue ~]$
```

And there you have it. You should now have a CD with the SMS compatible AVI file on it. This CD won't work in your PC. In fact, if you put it in, it will probably try to play it as an audio file and you'll just hear 'noise'. Start up SMS, then put the disc in your PS2, and you should see the following:

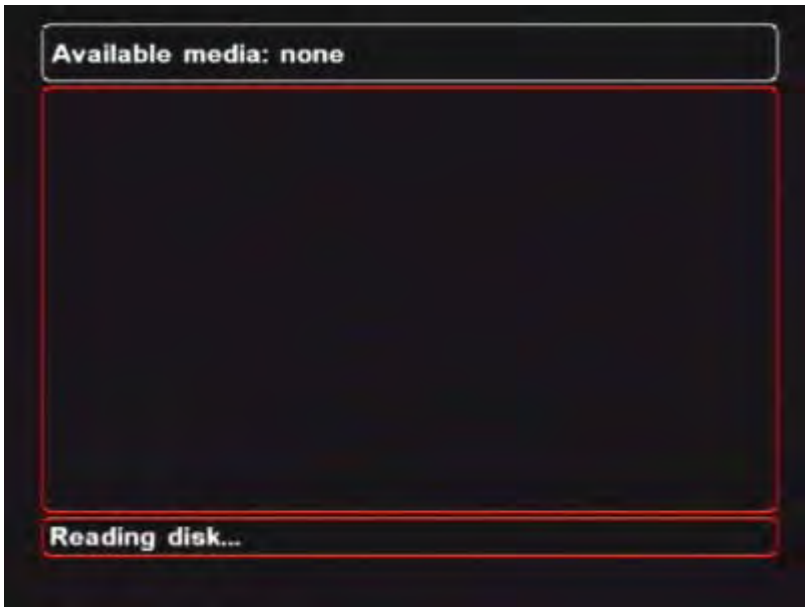

Figure 3.22. Screenshot showing display while disc is loading.

Figure 3.23. Screenshot of SMS showing video file loaded via CD-R in CD drive (CDDAFS format).

You can now browse to the file you copied, and press X to start playback in the usual way.

If you don't see the file, and get constant whirring from your PS2, or the following 'red' icon, then there is a problem with your disc. You've probably got a coaster (i.e. wasted CDR), and will need to try again. Check the instructions and try a lower burn speed. If you were using a CD-RW, try a CD-R.

Figure 3.24. Screenshot of SMS after loading failed or incompatible CD.

3.4. Playing files from a DVD-R (without a modchip)

> **Warning**
>
> Don't do this if you have a modchip. You don't need to, and this actually prevents PS2's with some modchips from reading the DVD while the chip is turned on. Modchip users can just burn a normal Data DVD.

DVD Video Discs are playable in your PS2, and because of this, they can be read without a modchip. The PS2 is able to access any other files that happen to be on the disc alongside the video. In order for SMS to read the DVD, we are going to make a dummy DVD Video disc, which we can then fill up with our DivX files. We've already done the hard work of creatig a suitable DVD Video, so all you have to do is burn it with Nero, along with your video files.

- Grab the dummy DVD movie here (144k), and unzip it onto the Desktop. or create your own DVD-Video files.
- Open Nero. Select DVD, and choose to create a DVD-Video. Press New.

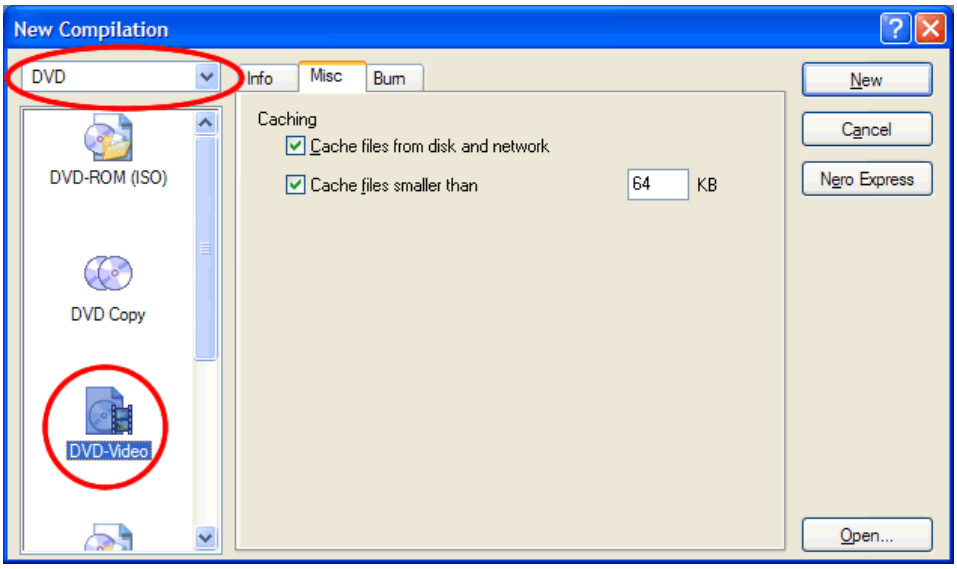

Figure 3.25. Select DVD option.

- Drag the dummy DVD-Video files into the VIDEO_TS folder on the DVD.

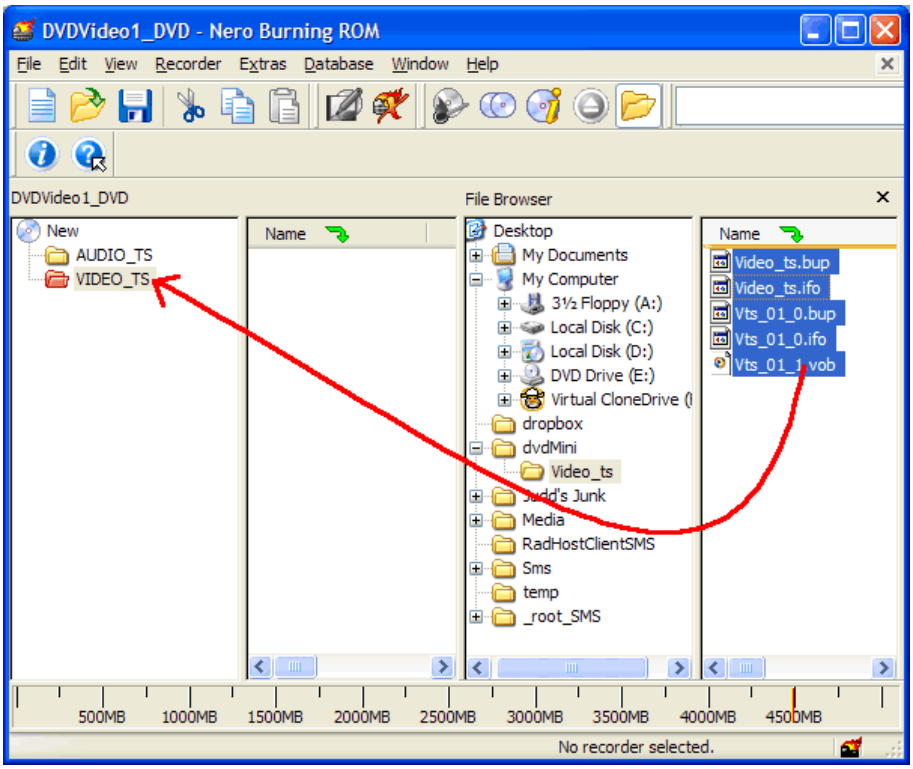

Figure 3.26. Copy dummy DVD-Video files

- Fill up the rest of the DVD with your favourite DivX and MP3 files.

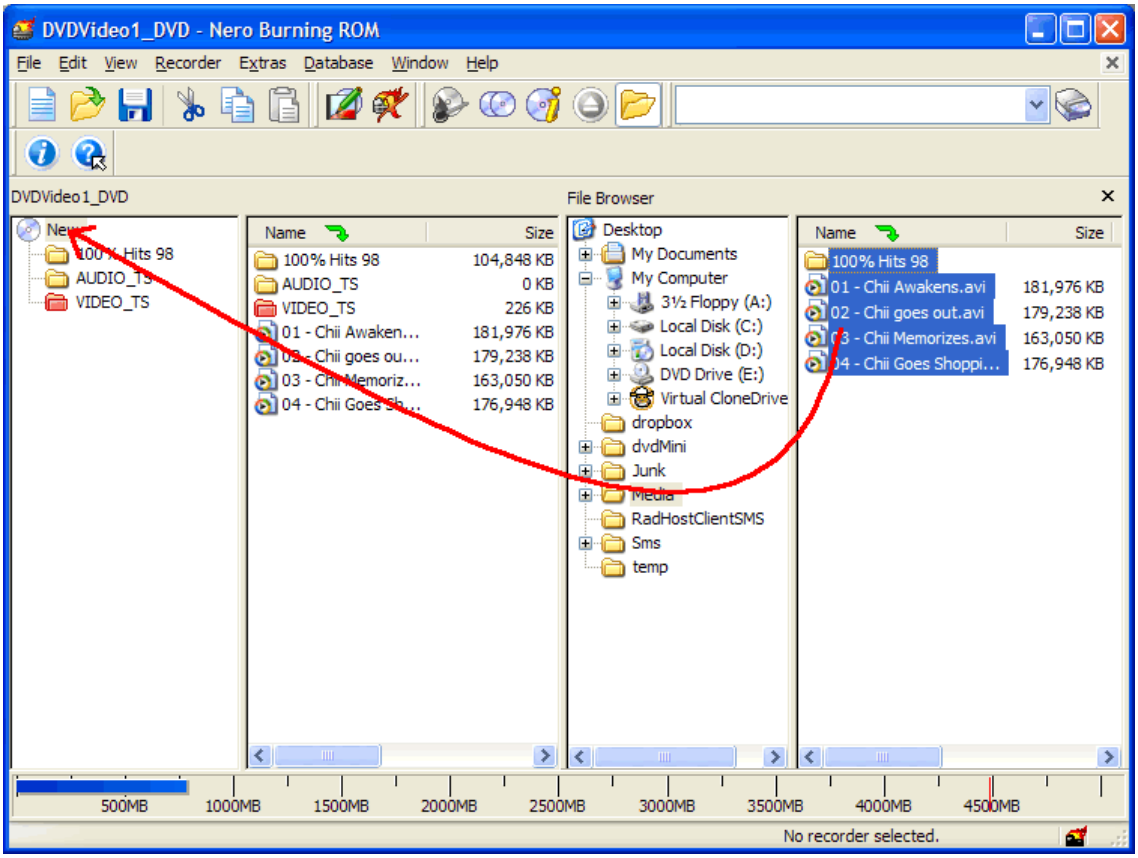

Figure 3.27. Copy your own media files.

- Burn the DVD. You can now play it using SMS in any unmodified console.

3.5. Playing video files from a PS2 Internal Hard Drive

If you have a Hard Drive (HDD) on your PS2 you can use it to store and play video and music files using SMS.

You can use any type of Hard Drive you want, whether it is Sony's official PS2 HDD or any 'normal' PC HDD. For a list of different HDDs showing which ones work on the PS2, look here: http://ps2drives.x-pec.com/. Please keep in mind that you need a Sony Network Adaptor to be able to connect the HDD to the PS2.

> **Note**
>
> Some users have reported problems about SMS not detecting the HDD on their Slimline PSTwo, when using mods like HDConnect. Therefore we assume HDD detection only works on 'older versions' of the PS2 (V0-11).

You can transfer the files to your HDD in many ways. You can do it via FTP, using the 'host' functionality in uLaunchELF or using a Windows application called 'PFS Explorer'.

Transfering files to the HDD is out of the scope of this Manual, but you can follow the instructions in the Section 2.3.1.1, “ Starting the FTP Server (uLaunchELF) ” section, and transfer the files you want to your HDD using the FTP method explained there.

> **Warning**
>
> It is not recommended to use the 'PFS Explorer' to transfer files to the HDD since some users have reported problems with the application (e.g. lost data, deleted partitions, etc).

Whichever method you choose to transfer files to your HDD, you should create a new partition to store your media files. To create a partition you will need a tool called 'DMS HDD Format Tool' . For a step-by-step instruction on how to use this tool look here: http://www.exploitstation.com/articles/launchelf_tut/launchtut.html (scroll down). After you have created the partition you can use the methods mentioned above to transfer your media files to the HDD partition(s) you just created.

When you launch SMS you should see the HDD icon next to the other devices in 'Available Media'. If you don't and you are using SMS v1.6 or above you probably need to go to the menu and start the HDD support from there. To do this, just open the menu (hit START in the browser window), go to 'Device Settings' and choose the 'Start HDD Support' option.

You'll probably want SMS to detect the HDD when it starts. To activate this, check the option 'Autostart HDD' in the menu.

Figure 3.28. SMS 1.6 Device Settings Menu.

If you want, you can go to the 'Browser Settings' menu and change some options related to the HDD:

- Display HDL partitions - Enabling this option will make the partitions created by HDLoader to show up in the browser. (recommended: OFF)
- Hide system partitions - Enabling this option will make the partitions created by the PS2 not to show up in the browser. (recommended: ON)

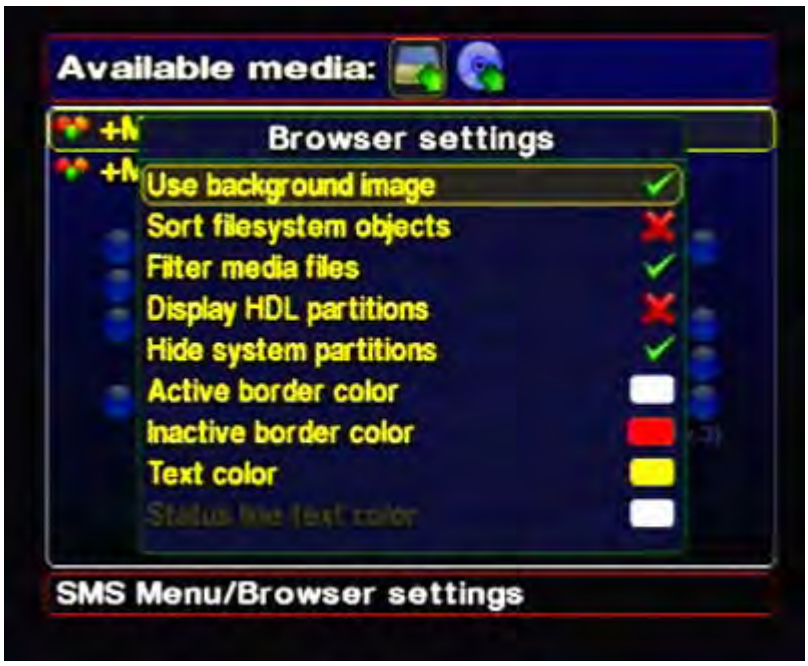

Figure 3.29. SMS Browser Settings Menu.

Now exit the menu, and press RIGHT on your gamepad to select the HDD icon and browse the contents of the HDD.

Figure 3.30. SMS with HDD support activated.

Select the file you want to play and press X to start playback.

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3.4. Playing files from a DVD-R (without a modchip) | Home | 3.6. Playing video files from a USB mass storage drive connected to the PS2

3.6. Playing video files from a USB mass storage drive connected to the PS2

You can play audio and video files from a USB stick connected to the front of your PS2.

SMS reads files from a USB drive using a USB driver built-in to the SMS application. There's no need to install any additional files to enable USB support in new versions of SMS (V1.7 or later). Older versions required a 3rd party `USBD.IRX` file.

When you plug a compatible USB drive into the front USB port on the PS2, you will see a new icon as shown below. Press RIGHT to select this icon and browse the USB drive.

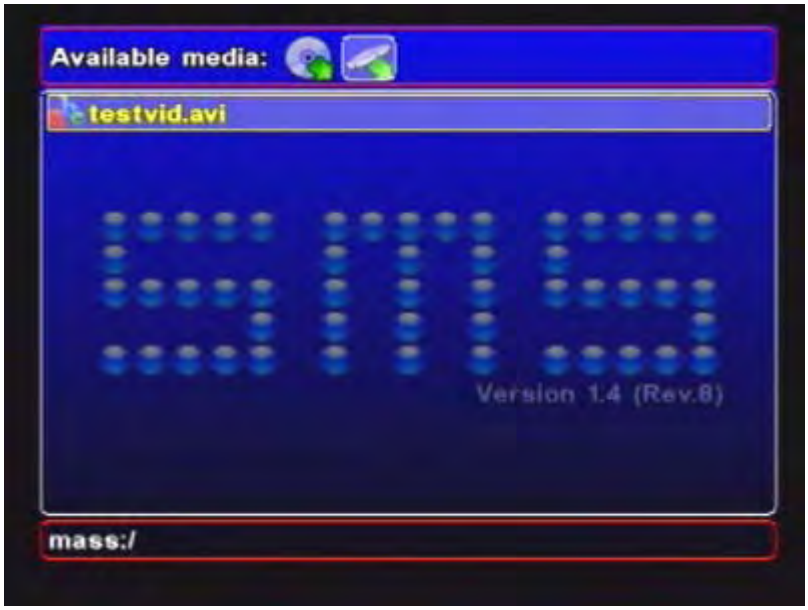

Figure 3.31. SMS with USB activated.

As usual, press X to play the selected media file.

3.7. MP3 Audio Playback

SMS (v1.5 onwards) contains an MP3 player with M3U playlist support. All files can be accessed in exactly the same ways as video files (via Network, CDDAFS CD-R, DVD-R, Internal HDD or USB).

3.7.1. Playing single MP3 files

Playing a single MP3 is done just as though you are playing an AVI video file. Locate the file using the browser, then press X to start the playback.

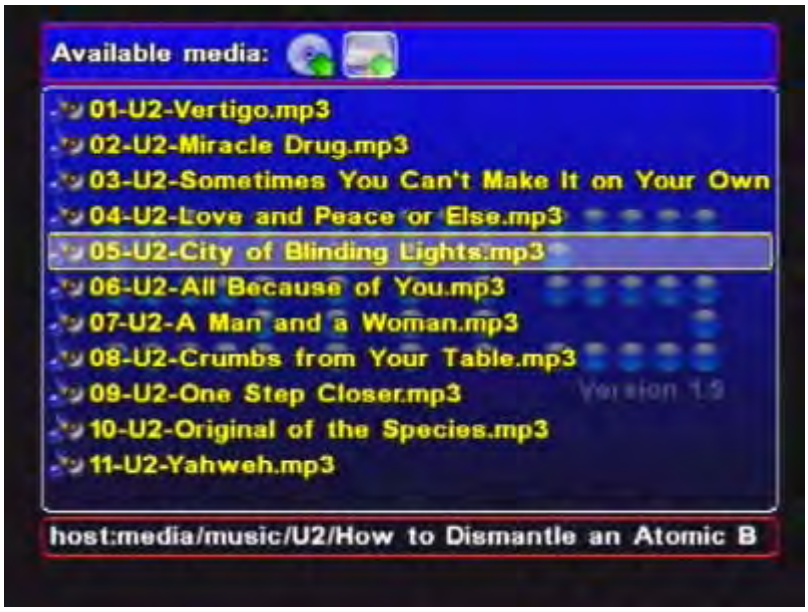

Figure 3.32. Screenshot showing selection of MP3 file in file browser.

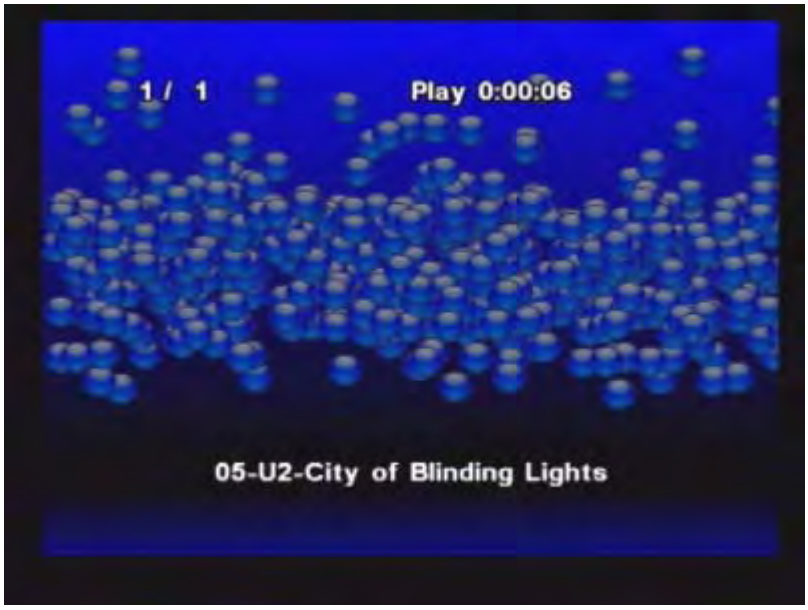

Figure 3.33. Screenshot showing MP3 playback.

3.7.2. Playing multiple MP3 files without a Playlist

You can play the contents of a folder as an automatic playlist by pressing 'O' on the folder name. The files will be played in alphabetical order.

3.7.3. Playing multiple MP3 files using a Playlist

Multiple MP3 files can be played using an `.m3u` playlist. You may need to modify the `.m3u` file to make sure it only contains relative paths and not absolute paths.

- On your PC, Using windows media player/winamp etc create an m3u playlist. (In WMP this is File->Save Playlist As), navigate to the folder where the mp3 files are stored, select `.m3u` format and type a filename.
- Open the m3u file in a text editor (e.g. Notepad and delete the path names. (i.e. Convert '`c:\my music\myfile.mp3`' to '`myfile.mp3`'). If you saved the m3u file in the right place, windows media player should have removed these for you, if not, manually remove them yourself, and save the file.
- The path names are allowed to include a directory relative to where the m3u file is (e.g. .m3u file can point to files in a subdirectory), but it must not contain your full system path (this is because SMS won't know what to do when it sees `C:\...`!).
- On your PS2, start up SMS, and navigate to the `.m3u` file you created. Press X to start playback. Use LEFT and RIGHT to skip forwards or backwards. (you can only skip once a file is playing).

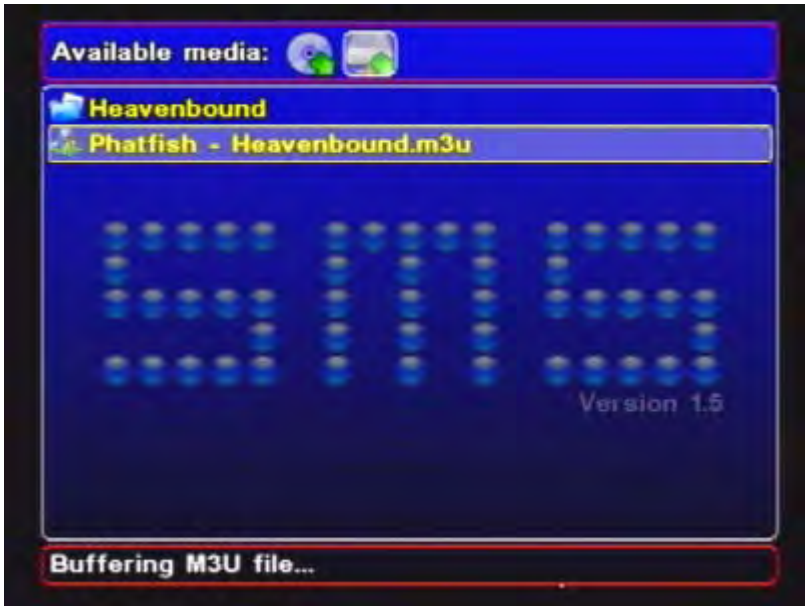

Figure 3.34. Screenshot showing M3U file loading.

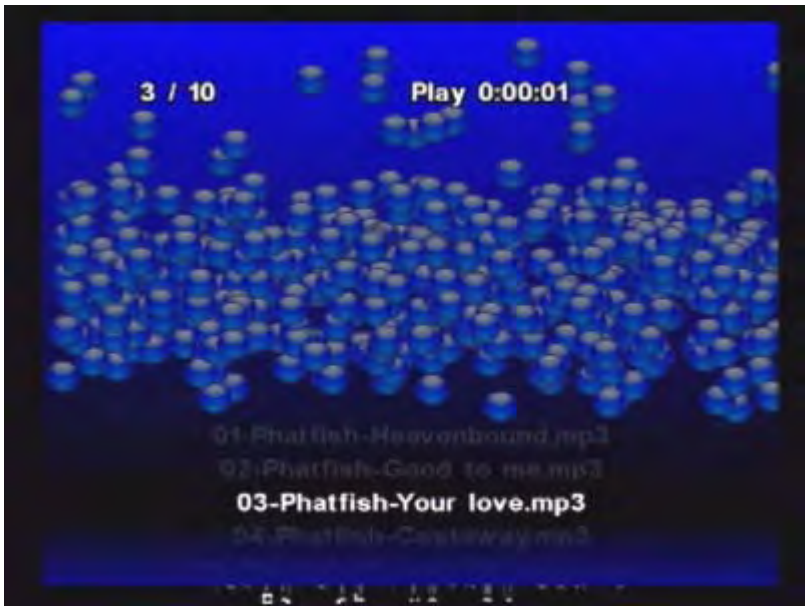

Figure 3.35. Screenshot showing M3U playlist playing.
Screenshot mostrando uma 'playlist' M3U a tocar.

> **Warning**
>
> M3U support is still in development; some users have experienced unexpected crashes. Keeping mp3 filenames as short as possible will help reduce this until the problems are permanently fixed. If you are experiencing problems, try shortenning your filenames.

> **Note**
>
> It is not possible to edit a playlist on the PS2, playlists can only be edited on a PC then transfered to the PS2.

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3.6. Playing video files from a USB mass storage drive connected to the PS2 | Home | 3.8. Subtitles

3.8. Subtitles

Subtitle support was added in SMS v1.5. Support is included for `.srt` (SubRip) and `.sub` (MicroDVD) formats.

3.8.1. Playing Videos With Subtitles

To play back a movie with subtitles, you'll need the movie `.avi` file and a corresponding subtitle file in the desired language. Subtitle files are available from several download sites, or you can rip your own from the DVD. Where or how to get subtitles is beyond the scope of this manual, but either way you'll end up with a subtitle file. A subtitle file is a human readable text file (you can open it in notepad if you want), which defines the text and the timing of the words which appear on the screen.

The Player Settings menu (press Start in the SMS browser then select Player Settings, and press X) is used to control the subtitle settings. The main option you'll want to turn on is 'Autoload subtitles'. The subtitle position and colour can be adjusted here too.

Figure 3.36. Screenshot showing subtitle settings.

SMS currently supported subtitle formats:

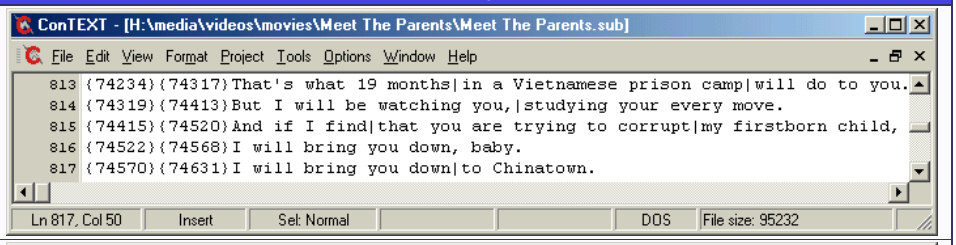
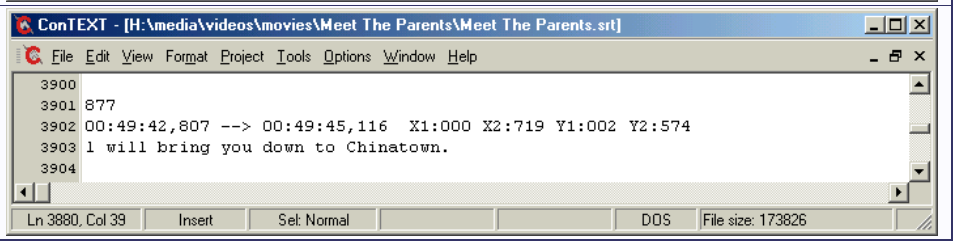
Format	Extension	Example
MicroDVD	.sub	
SubRip	.srt	

Table 3.1. Subtitle formats supported by SMS

> **Tip**
>
> If you aren't sure about subtitle files, then I recommend that you get them working on your PC first, using a PC player that supports subtitles (such as MPlayer). Mplayer follows the same rules as SMS when searching for subtitle files, and plays them by default if it finds them. It's quite handy for quickly verifying files before trying them on SMS.

The subtitle file itself must be copied into the same directory as the video file, with the exact same filename as the video, the only difference being the extension (`.srt` or `.sub`). The extension must be in lower-case.

Once you have the file in the right location, start SMS and navigate to the `.avi` video file as usual, then press X.

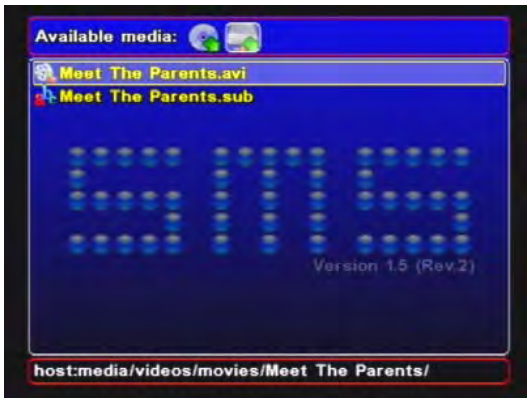


Figure 3.37. Screenshot showing SMS while browsing for video (note subtitle file in same directory).

SMS will automatically look for a subtitle file, and if it finds one, the following 'loading subtitles' message will be displayed:

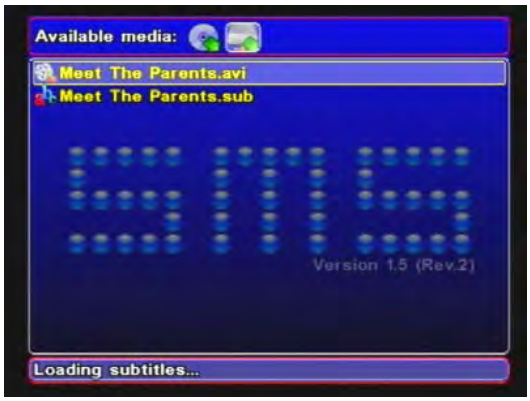


Figure 3.38. Screenshot showing SMS while lauching video with subtitles.

During playback, the subtitles will appear on the screen (colour/position are adjustable in the player settings menu).

Figure 3.39. Screenshot showing SMS playback with subtitles.

The synchronisation between the subtitles and the audio can sometimes go out. You can fine tune the timing during playback (see controls) section. I've found less synchronisation problems with `.sub` files than `.srt`, but your results may vary.

3.8.2. Manually Selecting the Subtitle File

If you want to use a special subtitle file, that doesn't share the filename of the video file, you can do so by pressing 'O' with the video file selected. This activates a 'mini browser', in which all of the available subtitle files (within the current directory) can be selected. Select the desired subtitle file, then press 'X' or 'O' to begin playback with that file. Press 'TRIANGLE' to cancel the selection.

3.8.3. Non-ASCII Character Sets

If your subtitles have non-ASCII character sets, then you'll need to add support for the fonts separately.

Details of how to do this may follow in a later version of the SMS manual. For now, please refer to the official SMS forums (http://www.ps2-scene.org/forums/forumdisplay.php?f=111), and the README for SMS.

This extract from the README may help you:

```
Following fonts can be loaded:
- mc0:SMS/ascii.mtf - contains 96 ascii characters ( 32-127)
- mc0:SMS/latin2.mtf - contains 128 latin2 characters (128-255)
- mc0:SMS/cyrillic.mtf - contains 128 cyrillic characters (128-255)
- mc0:SMS/latin1.mtf - contains 128 latin1 characters (128-255)
- mc0:SMS/greek.mft - contains 128 greek characters (128-255)
New font can be created by 'MTKFontCreator' utility (google) (I've used version 0.6.2).
During font save select "Save Mediatek Font -> 4 color comp., variable width (NEW mode)".
Min height must be set to 32. During font generation Max Width and Height parameters
```

```
(displayed on the status line) must not exceed 32. No error checks etc. are performed
by SMS here, so use it very carefully and on your own risk :). Probably .ini file
for that utility has to be adjusted on site in order to generate reduced character sets
(96 and 128 characters instead of 256). By changing that .ini file it's possible to
create virtually any character sets (ISO-8859-7, for instance);
```

Prev 3.7. MP3 Audio Playback | Up Home | Next 3.9. Skinning

3.9. Skinning

SMS allows basic 'skinning' of the player. Essentially, this means you can change the backdrop wallpaper of the browser to be an image of your choice.

> **Note**
>
> The current support for skinning only allows you to change the background image of the browser. It does not allow you to re-arrange the layout of the controls on the screen.

3.9.1. Creating a Skin

The skin file is a DivX5xx/XviD encoded I-Frame, named `mc0:/SMS/SMS.skn`. A small windows program (pic2sms.exe) has been written to allow you to create these files from normal image files. You'll first of all need an image file to start from. In this example, I've used a holiday photo (jpeg).

What you need to create is a bitmap file, with dimensions less than 800x600. If you want some help finding out where the screen elements are in relation to this, you can download a template file from here: http://www.ps2-scene.org/forums/attachment.php?attachmentid=8751&d=1131850982. [Warning - changes from SMS V1.5 to V1.6 may not be reflected in this template.] This is a Photoshop format (`.psd`) file, but if you haven't got Photoshop you can open it up in the GIMP (free graphics editor) http://www.gimp.org/. When you've finished playing with how it looks, save the file as a single layer bitmap (`.bmp`) file into an empty folder on your computer.

Next, download the SMS skin generator (Win32 App) pic2sms.exe from http://home.casema.nl/eugene_plotnikov/, and extract the `pic2sms.exe` file from the `pic2sms.rar` file using WinRAR. Copy it into the same folder on your computer. Then try double clicking the file. If it opens up first time with no errors, everything's ok. If you see a message saying 'cannot find xvidcore.dll', close the program, then download `xvidcore.dll` from http://www.dll-files.com/dllindex/dll-files.shtml?xvidcore or any other location (try google). Copy the file `xvidcore.dll` into the same directory as pic2sms.exe. When you run the program again, you should get no errors.

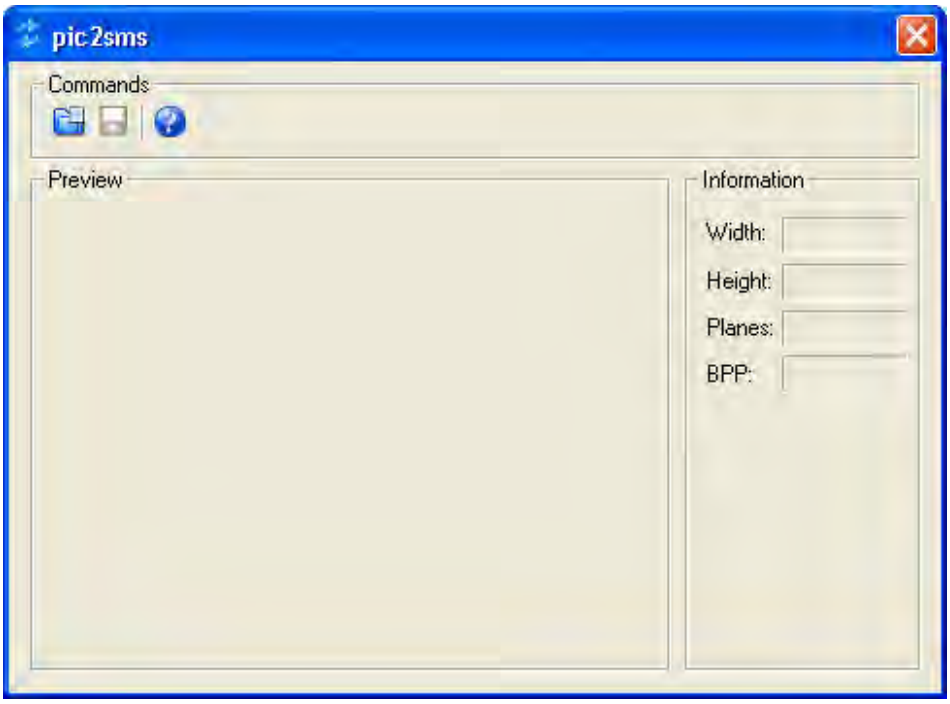


Figure 3.40. Pic2sms.exe application.

Now click on the 'open' button and open the bitmap file you just created.

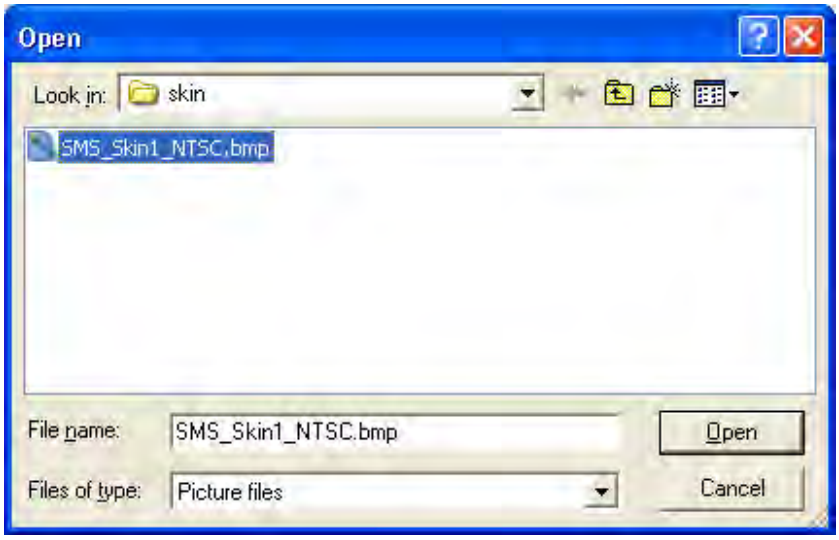


Figure 3.41. Open the image file

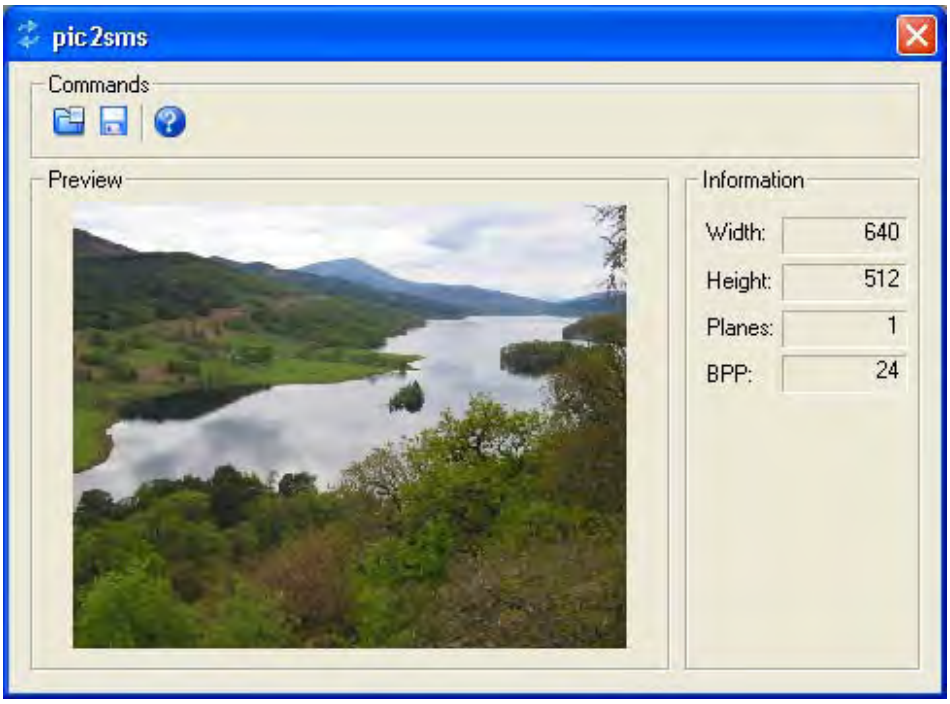


Figure 3.42. Image file loaded

You should see your image appear in the window. Click the save button to create a `.skn` file in the same directory. That's it - your skin is created.

3.9.2. Applying a Skin

To apply a skin (whether it's one you've downloaded, or one you made yourself), you need to do the following:

Get hold of your `SMS.skn` file. If your file is `xxxxxx.skn`, rename it to `SMS.skn`.

Now you need to transfer the file to `mc0:SMS/SMS.skn` (i.e onto the memory card in slot 1 on your PS2). Here we'll assume that you're transfering via FTP. On your PS2, start your ELF launcher (such as uLaunchELF), and select the FTP server program (e.g PS2NET).

Once your PS2 FTP server is running, go to your PC, start up your FTP client (e.g. FileZilla), and connect to the PS2.

Drag and drop the file `SMS.skn` into the location `mc0:/SMS/SMS.skn`. When it completes, disconnect the FTP client and restart the PS2.

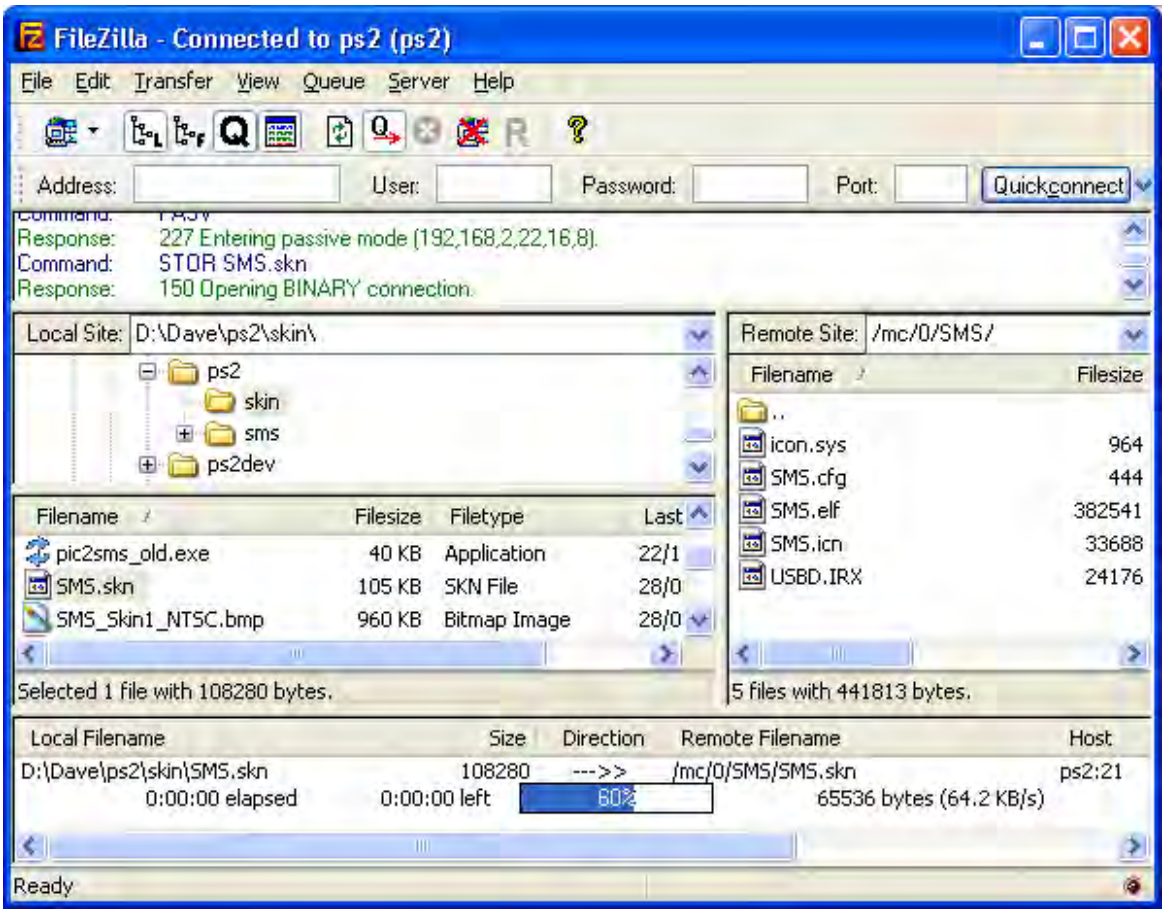


Figure 3.43. Transfering skin file to PS2.

On your PS2, start up SMS as normal, then press START to bring up the configuration menu, then select 'browser settings'.

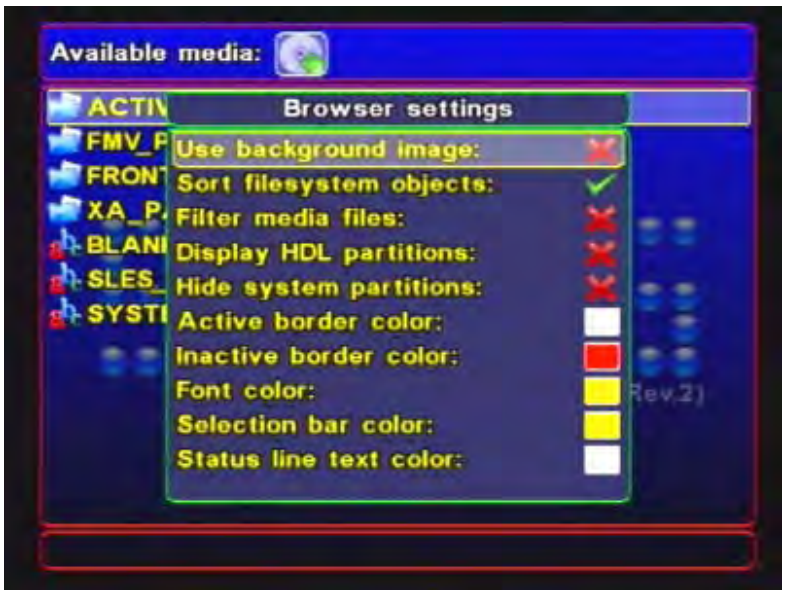


Figure 3.44. Browser settings menu.

Tick the option 'Use background image' to turn the skin on. You should see the background immediately change.

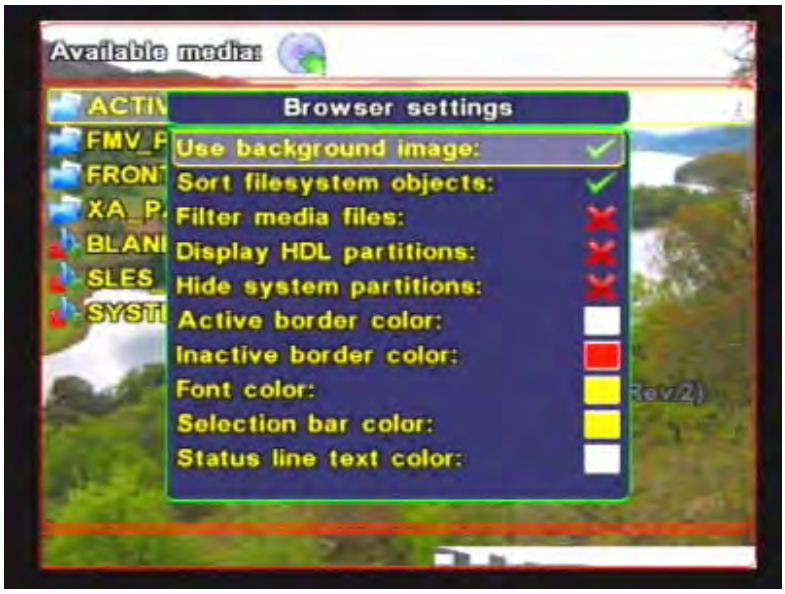


Figure 3.45. Browser settings menu (skin activated).

If you need to change the skin, copy a new `SMS.skn` over the top of the old one.

Figure 3.46. Example skin.

> **Note**
>
> SMS versions 1.5 and below had a different skin format, which used a `mc0:/SMS/skin.sms` file instead of `mc0:/SMS/SMS.skn`. There was also a different version of the skin generator pic2sms.exe. The old skin generator is no longer available for download. If you have an old version of SMS, we recommend upgrading both SMS and pic2sms.exe to the latest version from the SMS web site.

Appendix A. Frequently Asked Questions

Appendix A. Frequently Asked Questions

A.1. *I've made my CDDAFS CDR but my PS2 won't boot from it - It just sees it as an audio CD. What's wrong?*
A.2. *How does SMS playback quality compare with PS2Reality Media Player?*
A.3. *I can't see my network files - what's wrong?*
A.4. *What's an exploit? This sounds bad. Can I go to prison for running an exploit?*
A.5. *What is the “Independence Exploit” and how does it help me?*
A.6. *I can't access SMS on my DHCP network. SMS won't autoconfigure it's IP address. What's wrong?*
A.7. *Does the PS2 optical digital output (S/PDIF) work in SMS for AC3 passthrough?*
A.8. *What types of of writeable media (DVD-R/DVD+R/DVD+RW/DVD-RW/CDR/CDRW) will work with SMS?*

A.1. *I've made my CDDAFS CDR but my PS2 won't boot from it - It just sees it as an audio CD. What's wrong?*

CDXplorer does not create a CD-R which you can boot from. It just creates a disc that can be read once SMS is running. CDDAFS is not a method to launch SMS, it is a method to provide files to SMS once SMS is running. As far as I know there is no way to 'boot' SMS off a CD, DVD-R or any other removable media without a Mod-Chip. You always need either:

- An exploit
- A mod chip

to run SMS first... and *then* you put in your CDDAFS disc, DVD-R or whatever. In many cases, `SMS.ELF` will be put on the memory card, then an exploit will be used to launch SMS from the memory card. Without an exploit or modchip there is no known way you can get your PS2 to run SMS. But if you find a way - let us know!

A.2. *How does SMS playback quality compare with PS2Reality Media Player?*

We aren't currently attempting to compare or benchmark SMS against any other media players at the moment. The only goal is to make SMS as good as possible. If you'd like to do some detailed comparisons yourself, go ahead, we'd be interested in the results.

A.3. *I can't see my network files - what's wrong?*

Check in the network settings menu (on SMS: Start->Network Settings), and if you see it, press 'start network now'. Turning on Autostart network will make SMS try to access a client at startup. If you are still having problems, try restarting the client (e.g RadHostClient) on your PC, and check the instructions again.

A.4. *What's an exploit? This sounds bad. Can I go to prison for running an exploit?*

Sony Computer Entertainment™ disapprove of exploits and mod-chips yet they continue to be sold across the world. Legislation may vary in different countries, so you are advised to check local laws before installing an exploit or purchasing a mod-chip.

A.5. *What is the “Independence Exploit” and how does it help me?*

The Independence Exploit is a software based exploit that allows a PS2 to run unencrypted and homebrew applications (such as SMS) from the memory card. A description of what the exploit actually is can be found here.

The Independence Exploit is one of the techniques that can be used to trick your PS2 into running SMS. Normally your PS2 does not allow you to run unencrypted programs, and this protection is in place mainly to reduce the spread of copied games. When it comes to legitimate open source projects like SMS, the protection only stands in the way of running SMS. When installed, the Independence Exploit allows the user to run a specific application stored on the memory card. Often the chosen application will be an ELF launching program (a file browser) which then allows further applications to be launched. The Exploit itself is executed by inserting a chosen PS1 “trigger disc”, inserting a memory card with specially modified files on it, and then pressing reset. Tutorial of how to get the correct specially modified files onto your memory card can be found here.

The recommended approach is to use the tutorial to install an ELF launching program and an FTP server. Then you can use the FTP server to install as many other applications (ELF files) as you want. It also then allows you to make backups of all your saved games which is handy for those strange people who still use their PS2 to play games!

The exploit is significant to SMS users since it is one of the cheapest ways of running SMS, requiring no additional hardware other than a PS2, a memory card, and an original PS1 game.

A.6. ***I can't access SMS on my DHCP network. SMS won't autoconfigure it's IP address. What's wrong?***

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A.6. *I can't access SMS on my DHCP network. SMS won't autoconfigure it's IP address. What's wrong?*

SMS will not automatically configure it's IP address from a DHCP (Dynamic Host Configuration Protocol) server, such as the DHCP server normally found running in wireless access points etc. SMS requires a static (or manual) IP address, set in `mc0:/SYS-CONF/IPCONFIG.DAT`, (see Section 2.6.1, " Network Configuration ").

This does not mean that you need to disable DHCP and make your whole network run on static IP addresses. All you need to do is check the configuration of the DHCP server, and manually set your PS2 IP address to be compatible. Most DHCP servers will have a range of IP addresses that they will assign to DHCP clients (for example, my linksys WRT54G access point assigns IP addresses from 192.168.1.100 to 192.168.1.254)

As long as you set your PS2 IP address outside of this range (e.g. 192.168.1.22), then SMS will run happily alongside your DHCP clients. You may need to adjust your DHCP settings by changing the start IP address if there is not already a range you can use.

Of course you need to make sure that the IP address you use is not used by any other nodes on your network (such as PCs, other PS2s, or the access point itself), and the PS2 must be on the same subnet (i.e. the first 3 numbers of the IP address must be the same as other nodes on your network).

> **Tip**
>
> If you are not sure whether you've got a DHCP server or not, go to a command prompt, and type **`ipconfig /all`**. If you see a DHCP server listed with an IP address, then it means you `have` got a DHCP server running. You can usually access the configuration settings of access points by typing the access point IP address into a web browser.

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A.7. ***Does the PS2 optical digital output (S/PDIF) work in SMS for AC3 passthrough?***

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A.7. *Does the PS2 optical digital output (S/PDIF) work in SMS for AC3 passthrough?*

Yes, you can connect the PS2 output to an external audio processor via a fibre optic cable. You can enable the output by selecting SMS Menu -> Player settings. This has been tested with a SoundBlaster PC sound card and 384kb/s ac3 streams.

> **Note**
>
> It is not possible to adjust the audio volume in this mode.

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A.8. *What types of of writeable media (DVD-R/DVD+R/DVD+RW/DVD-RW/CDR/CDRW) will work with SMS?*

Users have had success with all current types of writeable disc, but the most popular in a recent survey was the DVD-R. Please note that without a mod chip, the only way you can trick the PS2 into reading your home-burned discs, is either the CDDAFS CD-R method or the DVD-R 'Dummy DVD Video Disc' method.

Format	Working?	Comments
CDR	Yes	None
CDRW	Yes	None
DVD-R	Yes	None
DVD+R	Yes	None
DVD-RW	Yes	None
DVD+RW	Yes	None

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B.1. VESA Video Modes

Two additional video modes are available for SMS:

- 640x480@60Hz (press select+L1 during startup)
- 640x480@75Hz (press select+L2 during startup)

These modes are not accessible in the normal SMS configuration menu - they can only be set at startup.

> **Note**
>
> These have only been tested using a viewsonic VX910 TFT monitor with the official Sony cable.

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Version 1.2, November 2002

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